Bulletin of the Seismological Society of America. Vol. 60, No. 4, pp. 1337–1387. August, 1970

FAST EVALUATION OF SOURCE PARAMETERS FROM ISOLATED SURFACE-WAVE SIGNALS

PART I. UNIVERSAL TABLES

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ABSTRACT

Tables for spectral displacements of seismic surface waves from shear dislocations in flat multilayered earth models were prepared. Earth response functions for seven modes (R_{11}, R_{21}, R_{12}, L_0, L_1, L_2, L_3) at six periods (300 sec, 250 sec, 200 sec, 150 sec, 100 sec, 50 sec) and three paths (continental, oceanic, shield) were calculated for the source-depth range of 10 to 600 km at intervals of 5 km until 200 km, and thereafter at intervals of 10 km. Ground motion is given in micron-seconds for the three fundamental shear dislocations, each of strength $U_0dS = 10^3$ (m $\times$ km^2) and a delta-function time-dependence.

The tables provide the means for rapid evaluation of source parameters from spectral radiation patterns of amplitudes and initial phases.

Introduction

Amplitude theory of seismic surface waves due to shear dislocations in multilayered isotropic elastic media has been established by Ben-Menahem and Harkrider (1964), Harkrider (1964), Haskell (1964) and Ben-Menahem, Jarosch and Rosenman (1968). According to this theory surface-wave amplitudes and phases are given explicitly in terms of the source and path parameters. However, while the expressions for these spectral amplitudes depend on the source-orientation parameters in a simple manner, the structural parameters and the source's depth enter in a rather complicated way which necessitates lengthy computations. Thus, in order to facilitate the reduction and inversion of surface-wave amplitude and phase data, we have prepared detailed tables for various modes, periods, structures and source depth. It is hoped that the tables presented here will indeed fulfill this need.

Theory

Assuming that the seismic source is specified by a displacement dislocation U_0 tangential to a fault surface dS, and using the formulation of Ben-Menahem, Jarosch and Rosenman (1968), we may write the far-field spectral patterns of the vertical Rayleigh displacements (U_z) and the azimuthal Love displacements (U_θ) in the form

$$U_z = [U_0(\omega)dS] \frac{e^{-\gamma_R \Delta - \pi i/4}}{\sqrt{\sin\left(\frac{\Delta}{a}\right)}} [s_R S_R + p_R P_R + i q_R Q_R] \tag{1}$$

$$U_\theta = [U_0(\omega)dS] \frac{e^{-\gamma_L \Delta - 3\pi i/4}}{\sqrt{\sin\left(\frac{\Delta}{a}\right)}} [p_L P_L + i q_L Q_L] \tag{2}$$

where the propagation phases $e^{-ik\Delta}$ have been omitted and

$$s_R = \sin\lambda \sin\delta \cos\delta \tag{3}$$

$$q_R = (\sin\lambda \cos 2\delta) \sin\theta + (\cos\lambda \cos\delta) \cos\theta \tag{4}$$

$$p_R = (\cos\lambda \sin\delta) \sin 2\theta - (\sin\lambda \sin\delta \cos\delta) \cos 2\theta \tag{5}$$

$$S_R = P_R \left[\frac{1+\sigma_s}{1-\sigma_s} + \frac{{}^{\sigma}R_s^*(h)}{\mu_s} \frac{C_R}{\dot{u}_s^*} \frac{1-2\sigma_s}{1-\sigma_s}\right] \tag{6}$$

$$Q_R = -P_R \left[\frac{{}^{\tau}R_s(h)}{\mu_s}\right]\left[\frac{C_R}{\dot{u}_s^*}\right] \tag{7}$$

$$P_R = \frac{1}{4\pi a^2} [(k_R a)^{3/2} \sqrt{8\pi}] \left[\frac{\mu_s A_R}{k_R}\right]\left[\frac{\dot{u}_s^*}{\dot{w}_0}\right] \tag{8}$$

$$q_L = -(\cos\lambda \cos\delta) \sin\theta + (\sin\lambda \cos 2\delta) \cos\theta \tag{9}$$

$$p_L = (\sin\lambda \sin\delta \cos\delta) \sin 2\theta + (\cos\lambda \sin\delta) \cos 2\theta \tag{10}$$

$$Q_L = P_L \left[\frac{{}^{\tau}L_s^*(h)}{\mu_s}\right]\left[\frac{C_L}{\dot{v}_s}\right] \tag{11}$$

$$P_L = \frac{1}{4\pi a^2} [(k_L a)^{3/2} \sqrt{8\pi}] \left[\frac{\mu_s A_L}{k_L}\right]\left[\frac{\dot{v}_s}{\dot{v}_0}\right]. \tag{12}$$

Notation is the same as in Ben-Menahem and Harkrider (1964). Here, s_R is defined in a somewhat different way from that of Ben-Menahem, Jarosch and Rosenman (1968).

The symbols that appear in these expressions may be grouped as follows:

Geometrical parameters: Earth's radius (a), epicentral distance (Δ), source's depth (h), station azimuth (θ) with respect to fault's strike. (If one considers the source to be a "double couple" equivalent of a shear dislocation, one may choose the strike of either of the two nodal planes as a reference.)

Source parameters: Spectral displacement (U_0), fault's area (dS), slip angle (λ), dip angle (δ), fault's strike (θ_0).

Wave parameters: Wave numbers (k_R, k_L), phase velocities (C_R, C_L), attenuation coefficients (γ_R, γ_L), angular frequency (ω).

Plane-wave functions: Surface particle velocities ($\dot{u}_0$, $\dot{v}_0$, $\dot{w}_0$), particle velocities at source's depth ($\dot{u}_s$, $\dot{v}_s$, $\dot{w}_s$), depth-dependent factors of the stresses [$\tau_{R_s}(h)$, $\sigma_{R_s}(h)$, $\tau_{L_s}(h)$].

Medium parameters: Poisson's ratio at source's level (σ_s), rigidity at source's level (μ_s).

Medium amplitude functions: A_R, A_L, independent of source-type and depth (Harkrider, 1964).

Clearly, the spectral displacements are composite functions of the wave's period and mode, the source's depth and orientation, the station's azimuth and the structural and dissipation parameters of the layered medium. The dependence of the displace-

ments on the angle θ is known as the radiation pattern of the wave. Since both $U_z(\theta)$ and $U_\theta(\theta)$ are complex, there exist both amplitude and phase patterns.

To emphasize the θ-dependence of the field, it is useful to recast equations (1) and (2) in a different form. Defining the complex variable $z = e^{i\theta}$ we may write

$$U_\theta = U_0\left[\frac{dS}{4\pi a^2}\right]\frac{e^{-\gamma_L\Delta - 3\pi i/4}}{\sqrt{\sin\left(\frac{\Delta}{a}\right)}}(k_L a)^{3/2}\sqrt{8\pi}\left[\frac{\dot{v}_s}{2\dot{v}_0}\right]\left[\frac{\mu_s A_L}{k_L}\right]f(z) \tag{13}$$

where

$$f(z) = Az^2 + \bar{A}z^{-2} + Bz - \bar{B}z^{-1} \tag{14}$$

$$A = \cos\lambda\sin\delta - i\sin\lambda\sin\delta\cos\delta \tag{15}$$

$$B = -\left[\frac{{}^{\tau}L_s^*(h)}{\mu_s}\right]\left[\frac{C_L}{\dot{v}_s}\right](\cos\lambda\cos\delta - i\sin\lambda\cos 2\delta). \tag{16}$$

The *source function* $f(z)$ can be interpreted as a transformation of the unit circle boundary. It represents the departure from cylindrical symmetry that exists for a spherically-symmetrical source. Likewise, for Rayleigh waves

$$U_z = U_0\left[\frac{dS}{4\pi a^2}\right]\frac{e^{-\gamma_R\Delta - \pi i/4}}{\sqrt{\sin\left(\frac{\Delta}{a}\right)}}(k_R a)^{3/2}\sqrt{8\pi}\left[\frac{\dot{u}_s^*}{2\dot{v}_0}\right]\left[\frac{\mu_s A_R}{k_R}\right]g(z) \tag{17}$$

$$g(z) = z_0 + [Ez^2 + \bar{E}z^{-2} + Dz - \bar{D}z^{-1}] \tag{18}$$

where in equations (14) and (18), $\bar{A}$, $\bar{B}$, $\bar{C}$, $\bar{D}$ and $\bar{E}$ denote the complex conjugates of A, B, C, D and E, respectively, and

$$z_0 = \sin\lambda\sin 2\delta\left[\frac{1+\sigma_s}{1-\sigma_s} + \frac{1-2\sigma_s}{1-\sigma_s}\frac{C_R}{\dot{u}_s^*}\frac{\sigma_{R_s}^*(h)}{\mu_s}\right] \tag{19}$$

$$E = -(\sin\lambda\cos\delta\sin\delta + i\cos\lambda\sin\delta) \tag{20}$$

$$D = -\left[\frac{\tau_{R_s}(h)}{\mu_s}\right]\left[\frac{C_R}{\dot{u}_s^*}\right][\sin\lambda\cos 2\delta + i\cos\lambda\cos\delta]. \tag{21}$$

Since the dependence of U_z and U_θ on the structural constants of the elastic medium is complicated, we decided to obtain some explicit solutions for simple configurations in order to check the multilayered program. We have thus solved two problems: surface Rayleigh displacement from a dislocation source in a homogeneous half-space and Love displacements from a dislocation source in a layer over a homogeneous half-space.

Choosing the appropriate integral expressions given by Ben-Menahem and Singh (1968, paper I; 1968a, paper II), for the aforementioned cases, we find for

Vertical strike-slip dislocation ($\lambda = 0°, \delta = 90°$)

$$U_z = \frac{U_0\, dS}{2\pi} \sin 2\theta \int_0^\infty \frac{2\nu_\alpha\nu_\beta e^{-h\nu_\beta} - (2k^2 - k_\beta^2)e^{-h\nu_\alpha}}{F(k)} J_2(kr)k^3\, dk \tag{22}$$

$$U_\theta(h < H) = -\frac{U_0\, dS}{2\pi} \cos 2\theta \frac{\partial}{\partial r} \int_0^\infty \left[\frac{(\nu_\beta + \nu\nu_{\beta_1})e^{\nu_\beta(H-h)} + (\nu_\beta - \nu\nu_{\beta_1})e^{-\nu_\beta(H-h)}}{L(k, H)}\right] \cdot J_2(kr)\frac{k}{\nu_\beta}\, dk \tag{23}$$

$$U_\theta(h > H) = -\nu \frac{U_0\, dS}{\pi} \cos 2\theta \frac{\partial}{\partial r} \int_0^\infty e^{-\nu_{\beta_1}(h-H)} J_2(kr) \frac{k}{L(k, H)}\, dk. \tag{24}$$

Vertical dip-slip dislocation ($\lambda = 90°, \delta = 90°$)

$$U_z = \frac{U_0\, dS}{\pi} \sin\theta \int_0^\infty \left[\frac{e^{-h\nu_\beta} - e^{-h\nu_\alpha}}{F(k)}\right] \nu_\alpha k^2(2k^2 - k_\beta^2)J_1(kr)\, dk \tag{25}$$

$$U_\theta(h < H) = \frac{U_0\, dS}{2\pi} \cos\theta \frac{\partial}{\partial r} \int_0^\infty \left[\frac{(\nu_\beta - \nu\nu_{\beta_1})e^{-\nu_\beta(H-h)} - (\nu_\beta + \nu\nu_{\beta_1})e^{\nu_\beta(H-h)}}{L(k, H)}\right] \cdot J_1(kr)\, dk \tag{26}$$

$$U_\theta(h > H) = -\nu \frac{U_0\, dS}{\pi} \cos\theta \frac{\partial}{\partial r} \int_0^\infty e^{-\nu_{\beta_1}(h-H)} J_1(kr) \frac{\nu_{\beta_1}}{L(k, H)}\, dk. \tag{27}$$

Case III ($\lambda = 90°, \delta = 45°$)

$$U_z = \frac{U_0\, dS}{4\pi} \int_0^\infty [f_1(k)J_0(kr) - \cos 2\theta f_2(k)J_2(kr)] \frac{dk}{F(k)} \tag{28}$$

where

$$\begin{aligned} F(k) &= (2k^2 - k_\beta^2) - 4k^2\nu_\alpha\nu_\beta \\ L(k, H) &= (\nu_\beta + \nu\nu_{\beta_1}(e^{H\nu_\beta} - (\nu_\beta - \nu\nu_{\beta_1})e^{-H\nu_\beta} \\ f_1(k) &= k(2k^2 - k_\beta^2)(3k^2 - 2k_\alpha^2)e^{-h\nu_\alpha} - 6k^3\nu_\alpha\nu_\beta e^{-h\nu_\beta} \\ f_2(k) &= 2k^3\nu_\alpha\nu_\beta e^{-h\nu_\beta} - k^3(2k^2 - k_\beta^2)e^{-h\nu_\alpha} \end{aligned} \tag{29}$$

and

$$\nu_\alpha^2 = k^2 - k_\alpha^2, \qquad \nu_\beta^2 = k^2 - k_\beta^2, \qquad \nu_{\beta_1}^2 = k^2 - k_{\beta_1}^2, \qquad \nu = \frac{\mu_1}{\mu}. \tag{30}$$

The Rayleigh-wave displacements (U_z) refer to a half-space model while the Love-wave displacements (U_θ) refer to the single layer over half-space model. Consequently k_β and k_α in equations (22), (25) and (28) stand for the shear and longitudinal wave numbers in the half-space while k_β and k_{β_1} refer to the shear wave numbers in the layer

and the underlying half-space respectively. The layer thickness is denoted by H and μ, μ_1 are the respective rigidities in the layer and the underlying half-space.

The Love-wave displacements for case III are not required for the subsequent evaluation of the medium response functions. On comparing equation (7-7) of paper I with equation (8-2) of paper II, we see that U_θ for a vertical strike-slip fault must have the opposite sign in the reversed coordinate system, with respect to the coordinate directions of paper II. On the other hand, comparing equation (7-11) of paper I with equation (8-5) of paper II, we see that U_θ for a vertical dip-slip fault is unaffected by that transformation. These changes have been incorporated in equations (22) to (28).

Let $I = \int_0^\infty J_m(kr)G(k)/D(k)\,dk$ be any of the seven integrals given in equations (22) to (28). It is then well-known from the classical theory of seismology that the surface-wave contributions are given by

$$(I)_{\text{surface wave}} = -\pi i \sum_n H_m^{(2)}(k_n r) \frac{G(k_n)}{\left.\frac{\partial D}{\partial k}\right|_{k=k_n}} \tag{31}$$

where $k_n(\omega)$ is the nth root of $D(k) = 0$ and $H_m^{(2)}(x)$ is the Hankel function of the second kind and order m.

Employing the asymptotic expansion

$$H_m^{(2)}(x) = \sqrt{\frac{2}{\pi x}} \exp\left[-i\left(x - \frac{\pi m}{2} - \frac{\pi}{4}\right)\right] \tag{32}$$

and verifying that

$$\left.\frac{\partial F}{\partial k}\right|_{k=kR} = k_\beta{}^3 G(\hat{\gamma}, \eta^2) \tag{33}$$

$$G(\hat{\gamma}, \eta^2) = 2\frac{4\hat{\gamma}^2 - 1 - 8\hat{\gamma}^6(1 - \eta^2)}{\hat{\gamma}(2\hat{\gamma}^2 - 1)^2} \qquad \eta^2 = \frac{1 - 2\sigma}{2(1 - \sigma)} \tag{34}$$

$$\left.\frac{\partial L}{\partial k}\right|_{k=k_n} = 2k_L \cosh H\nu_\beta \left[\frac{\nu}{\nu_{\beta_1}} + H - \nu\frac{\nu_{\beta_1}}{\nu_\beta{}^2}(1 + \nu\nu_{\beta_1}H)\right] \tag{35}$$

where $k_R = \hat{\gamma}k_\beta$, $\hat{\gamma}$ being the root of the equation

$$(2\hat{\gamma}^2 - 1)^2 = 4\hat{\gamma}^2\sqrt{\hat{\gamma}^2 - 1}\,\sqrt{\hat{\gamma}^2 - \eta^2}.$$

Likewise k_L is the root of the known equation

$$\tan\left[H\sqrt{k_\beta{}^2 - k_L{}^2}\right] = \frac{\mu_1}{\mu}\frac{\sqrt{k_L{}^2 - k_{\beta_1}^2}}{\sqrt{k_\beta{}^2 - k_L{}^2}}.$$

Performing the necessary operations on the integrands of the integral expressions for the displacements, and comparing the results with the definitions of the functions P_R, Q_R, S_R, P_L and Q_L from equations (1) and (2) we have

$$P_R = \frac{1}{4\pi a^2}(k_R a)^{3/2}\sqrt{8\pi}\left[e^{-h\nu_\alpha} - \frac{2\hat{\gamma}^2 - 1}{2\hat{\gamma}^2}e^{-h\nu_\beta}\right]\frac{\hat{\gamma}(2\hat{\gamma}^2 - 1)}{G(\bar{\gamma}, \eta^2)} \tag{36}$$

$$Q_R = \frac{1}{4\pi a^2}(k_R a)^{3/2}\sqrt{8\pi}[e^{-h\nu_\beta} - e^{-h\nu_\alpha}]\frac{(2\hat{\gamma}^2 - 1)^3}{2\hat{\gamma}^2\sqrt{\hat{\gamma}^2 - 1}G(\hat{\gamma}, \eta^2)} \tag{37}$$

$$S_R = \frac{1}{4\pi a^2}(k_R a)^{3/2}\sqrt{8\pi}\left[(3\hat{\gamma}^2 - 2\eta^2)e^{-h\nu_\alpha} - \frac{3}{2}(2\hat{\gamma}^2 - 1)e^{-h\nu_\beta}\right]\frac{2\hat{\gamma}^2 - 1}{\hat{\gamma}G(\hat{\gamma}, \eta^2)} \tag{38}$$

$$P_L(h < H) = \frac{1}{4\pi a^2}(k_L a)^{3/2}\sqrt{8\pi}\left[\frac{\sqrt{k_L^2 - k_{\beta_1}^2}\cos\left[h\sqrt{k_\beta^2 - k_L^2}\right]}{k_L\Phi}\right] \tag{39}$$

$$P_L(h > H) = \frac{1}{4\pi a^2}(k_L a)^{3/2}\sqrt{8\pi}\left[\frac{\nu\sqrt{k_L^2 - k_{\beta_1}^2}\cos\left[H\sqrt{k_\beta^2 - k_L^2}\right]}{k_L\Phi}\right] \cdot e^{-(h-H)\sqrt{k_L^2 - k_{\beta_1}^2}} \tag{40}$$

$$\Phi = H\sqrt{k_L^2 - k_{\beta_1}^2} + \frac{\nu(k_\beta^2 - k_{\beta_1}^2)}{(k_\beta^2 - k_L^2) + \nu^2(k_L - k_{\beta_1}^2)} \tag{41}$$

$$Q_L(h < H) = \frac{1}{4\pi a^2}(k_L a)^{3/2}\sqrt{8\pi}\left[\frac{\sqrt{k_\beta^2 - k_L^2}\sqrt{k_L^2 - k_{\beta_1}^2}\sin\left[h\sqrt{k_\beta^2 - k_L^2}\right]}{k_L^2\Phi}\right] \tag{42}$$

$$Q_L(h > H) = \frac{1}{4\pi a^2}(k_L a)^{3/2}\sqrt{8\pi}\left[\frac{\sqrt{k_\beta^2 - k_L^2}\sqrt{k_L^2 - k_{\beta_1}^2}\sin\left[H\sqrt{k_\beta^2 - k_L^2}\right]}{k_L^2\Phi}\right] \cdot e^{-(h-H)\sqrt{k_L^2 - k_{\beta_1}^2}} \tag{43}$$

If a, h and H are given in kilometers, k_L, k_R, k_β and k_{β_1} in km^{-1}, then the functions P_R, Q_R, S_R, P_L and Q_L will be expressed in units of (km^{-2}).

The entities P_R, Q_R, S_R, P_L and Q_L were computed from their defining equations (6), (7), (8), (11) and (12). Afterward, their numerical values were increased by a factor of 10^9. The units of these functions in the tables are $[\text{km}^{-2}]$. For a loss-less medium at $\Delta = (n + \frac{1}{2})\pi a$ km, we find from equations (1) and (2)

$$U_z = [U_0\, dS]P_R e^{-\pi i/4} \qquad \text{vertical strike-slip fault } (\theta = 45°) \tag{44}$$

$$U_z = [U_0\, dS]Q_R e^{\pi i/4} \qquad \text{vertical dip-slip fault } (\theta = 270°) \tag{45}$$

$$U_z = \tfrac{1}{2}[U_0\, dS]S_R e^{-\pi i/4} \qquad \text{case III } (\lambda = 90°, \delta = 45°, \theta = 45°) \tag{46}$$

$$U_\theta = [U_0\, dS]P_L e^{\pi i/4} \qquad \text{vertical strike-slip fault } (\theta = 90°) \tag{47}$$

$$U_\theta = [U_0\, dS]Q_L e^{-\pi i/4} \qquad \text{vertical dip-slip fault } (\theta = 180°) \tag{48}$$

$$U_\theta = \tfrac{1}{2}[U_0\, dS]P_L e^{\pi i/4} \qquad \text{case III } (\lambda = 90°, \delta = 45°, \theta = 135°). \tag{49}$$

We have defined a unit fault to be equal to 1000 ($m \times \text{km}^2$) which is the same as 10^9 ($\mu \times \text{km}^2$). Equation (44) will then read $|\, U_z\,| = |\, (10^9 P_R)\,|$ μ-sec. Consequently

the meaning of the numbers in Tables 7 to 31 is 2-fold. First, they are the numerical values of $10^9 P_R \text{ km}^{-2}$, etc. Second, they measure the *spectral ground* displacements of the three fundamental dislocations for a fault of given strength and an assumed delta-function source-time dependence (Figure 1).

In order to verify the computed results we have evaluated numerically the functions P_R, Q_R, S_R, P_L and Q_L from equations (36) to (43). The following structural constants were chosen

Half-space: $(HS)\sigma = \frac{1}{4}$, $\beta = 6.24$ km/sec, $\alpha/\beta = \sqrt{3}$

Layer over half-space: $(L + HS)$

$$\alpha = 6.30 \text{ km/sec}, \qquad \beta = 3.64 \text{ km/sec}, \qquad \rho = 2.87 \text{ gm/cm}^3, \qquad H = 40 \text{ km}$$

$$\alpha_1 = 11.39 \text{ km/sec}, \qquad \beta_1 = 6.24 \text{ km/sec}, \qquad \rho_1 = 4.46 \text{ gm/cm}^3.$$

Numerical values of some constants for the half-space case are

$$\eta^2 = \frac{1}{3}, \qquad \hat{\gamma} = \frac{1}{2}\sqrt{3 + \sqrt{3}} = 1.0876639, \qquad G = -\frac{8\hat{\gamma}}{\sqrt{3}}.$$

The resulting curves are shown in Figures 2 to 7, 9 and 11. Amplitudes in all these figures are in μ-sec per $(m \times \text{km}^2)$ which is one part in 1000 of a unit fault.

Note that all curves of P_R, S_R and P_L indicate a marked discontinuity when the source's depth crosses the Moho. This is expected from the theory and is readily observed in equations (39) and (40): upon the substitution $h = H$ in these equations we find

$$P_L(H+) = \nu P_L(H-)$$

whereas

$$Q_L(H+) = Q_L(H-).$$

Tables, Figures and their Use

Three basic earth models were used in the computation of the transfer functions. Tables 1 (after Ben-Menahem and Harkrider, 1964), 2 and 3 (after Harkrider and Anderson, 1966) show the structural constants for these models. Seven surface modes were considered: The fundamental Rayleigh mode R_{11}, two higher modes R_{21} and R_{12}, the fundamental Love mode L_0 and three higher Love modes L_1, L_2 and L_3. The phase and group velocities of some representative periods for each mode are given in Tables 4 and 5. The diminution factor was evaluated for the fundamental Love and Rayleigh modes in the period range 300 to 50 sec for epicentral distances up to 120,000 km. Data for γ were taken from Ben-Menahem (1965). For the longer periods γ_L differs only slightly from γ_R and a common coefficient was chosen. For periods lower than 200 sec, different coefficients were chosen for Love (L) and Rayleigh (R) waves. Note that the diminution factor has periodic maxima at $\Delta_n/a = n\pi - \cot^{-1}(2\gamma a)$.

The method for calculating the medium-transfer functions was described by Ben-Menahem and Harkrider (1964). The functions defined therein were based on the "double-couple" equivalent of a shear dislocation. Therefore, their physical interpreta-

TABLE 1

STRUCTURAL PARAMETERS FOR A CONTINENTAL EARTH MODEL

Depth km	Layer Thickness km	α km/sec	β km/sec	ρ g/cm^3	μ dyne/cm^2	λ dyne/cm^2
11.0	22	6.03	3.53	2.78	.35 x 10^{12}	.32 x 10^{12}
29.5	15	6.70	3.80	3.00	.43	.48
43.5	13	7.96	4.60	3.37	.71	.71
62.5	25	7.85	4.50	3.39	.69	.72
100.0	50	7.85	4.41	3.42	.67	.78
162.5	75	8.00	4.41	3.45	.67	.87
225.0	50	8.20	4.50	3.47	.70	.93
300.0	100	8.40	4.60	3.50	.74	.99
400.0	100	9.00	4.95	3.63	.89	1.16
500.0	100	9.63	5.31	3.89	1.10	1.41
600.0	100	10.17	5.63	4.13	1.31	1.65
700.0	100	10.59	5.92	4.33	1.51	1.82
800.0	100	10.96	6.14	4.49	1.69	2.00
900.0	100	11.28	6.29	4.60	1.82	2.21
1025.0	150	11.46	6.38	4.69	1.91	2.34
1200.0	200	11.76	6.50	4.80	2.03	2.58
1400.0	200	12.02	6.61	4.91	2.15	2.80
1600.0	200	12.28	6.74	5.03	2.29	3.02
1800.0	200	12.54	6.85	5.13	2.41	3.25
2000.0	200	12.80	6.96	5.24	2.54	3.51
2200.0	200	13.02	7.00	5.34	2.62	3.82
2400.0	200	13.24	7.10	5.44	2.74	4.05
	∞	13.48	7.20	5.54	2.87	4.32

TABLE 2

STRUCTURAL PARAMETERS FOR AN OCEANIC EARTH MODEL

Depth km	Layer Thickness km	α km/sec	β km/sec	ρ g/cm^3	μ dyne/cm^2	λ dyne/cm^2
15.5	9	8.11	4.61	3.40	.72 x 10^{12}	.79 x 10^{12}
22.5	5	8.12	4.61	3.40	.72	.80
32.5	15	8.12	4.61	3.40	.72	.80
50.0	20	8.01	4.56	3.37	.70	.76
70.0	20	7.95	4.56	3.37	.70	.73
90.0	20	7.71	4.40	3.37	.65	.70
110.0	20	7.68	4.34	3.33	.63	.71
130.0	20	7.78	4.34	3.33	.63	.76
150.0	20	7.85	4.34	3.33	.63	.80
170.0	20	8.10	4.45	3.33	.66	.87
220.0	80	8.12	4.45	3.33	.66	.88
270.0	20	8.12	4.45	3.35	.66	.88
290.0	20	8.12	4.45	3.36	.67	.88
310.0	20	8.12	4.45	3.37	.67	.89
330.0	20	8.12	4.45	3.38	.67	.89
350.0	20	8.24	4.50	3.39	.69	.93
365.0	10	8.30	4.53	3.44	.71	.96
380.0	20	8.36	4.56	3.50	.73	.99
402.5	25	8.75	4.80	3.68	.85	1.13
425.0	20	9.15	5.04	3.88	.99	1.28
440.0	10	9.43	5.22	3.90	1.06	1.35
455.0	20	9.76	5.40	3.92	1.14	1.45
477.5	25	9.77	5.40	3.93	1.15	1.46
502.5	25	9.78	5.40	3.95	1.15	1.47
527.5	25	9.78	5.40	3.96	1.15	1.48
552.5	25	9.78	5.40	3.99	1.16	1.49
577.5	25	9.79	5.40	4.02	1.17	1.51
602.5	25	9.79	5.40	4.06	1.18	1.52
627.5	25	9.80	5.40	4.09	1.19	1.54
652.5	25	9.80	5.40	4.12	1.20	1.55
677.5	25	10.16	5.60	4.17	1.31	1.69
702.5	25	10.49	5.80	4.21	1.42	1.80
727.5	25	10.82	6.10	4.26	1.58	1.81
752.5	25	11.12	6.20	4.30	1.65	2.01
777.7	25	11.14	6.21	4.48	1.72	2.10
802.5	25	11.15	6.21	4.63	1.79	2.19
827.5	25	11.17	6.22	4.80	1.85	2.27
852.5	25	11.18	6.23	4.94	1.92	2.34
877.5	25	11.22	6.25	4.94	1.93	2.37
902.5	25	11.27	6.28	4.95	1.95	2.38
927.5	25	11.31	6.30	4.95	1.96	2.41
952.5	25	11.35	6.32	4.95	1.98	2.42
977.5	25	11.39	6.34	4.95	1.99	2.45
1002.5	25	11.43	6.36	4.95	2.00	2.47
1027.5	25	11.48	6.38	4.96	2.01	2.50
1052.5	25	11.52	6.39	4.96	2.02	2.53
1077.5	25	11.56	6.41	4.96	2.03	2.56
	∞	11.60	6.42	4.96	2.05	2.58

TABLE 3

STRUCTURAL PARAMETERS FOR A SHIELD EARTH MODEL

Depth km	Layer Thickness km	α km/sec	β km/sec	ρ g/cm³	μ dyne/cm²	λ dyne/cm²
19.0	5	6.40	3.70	3.08	.42 x 10^{12}	.42 x 10^{12}
27.8	13.5	6.70	3.92	3.42	.53	.48
37.5	5	8.15	4.75	3.42	.77	.73
50.0	20	8.16	4.75	3.42	.77	.73
70.0	20	8.21	4.75	3.42	.77	.76
90.0	20	8.26	4.75	3.42	.77	.79
110.0	20	8.32	4.75	3.42	.77	.82
130.0	20	8.30	4.70	3.40	.75	.84
150.0	20	8.28	4.58	3.40	.71	.91
170.0	20	8.28	4.54	3.40	.70	.93
190.0	20	8.28	4.54	3.41	.70	.93
210.0	20	8.28	4.54	3.42	.70	.94
280.0	120	8.28	4.54	3.45	.71	.95
350.0	20	8.31	4.54	3.45	.71	.96
365.0	10	8.51	4.64	3.45	.74	1.01
380.0	20	8.70	4.75	3.45	.78	1.05
402.5	25	8.74	4.75	3.66	.83	1.14
425.0	20	8.76	4.75	3.88	.88	1.23
440.0	10	9.04	5.00	3.90	.98	1.24
455.0	20	9.49	5.25	3.92	1.08	1.37
477.5	25	9.50	5.25	3.93	1.09	1.38
502.5	25	9.52	5.26	3.95	1.09	1.39
527.5	25	9.53	5.26	3.96	1.10	1.40
552.5	25	9.58	5.29	3.99	1.11	1.43
577.5	25	9.63	5.31	4.02	1.14	1.46
602.5	25	9.68	5.34	4.06	1.16	1.49
627.5	25	9.74	5.37	4.09	1.18	1.52
652.5	25	9.78	5.39	4.12	1.20	1.55
677.5	25	10.01	5.52	4.17	1.27	1.64
702.5	25	10.18	5.63	4.21	1.34	1.69
727.5	25	10.19	5.75	4.26	1.41	1.61
752.5	25	10.49	5.85	4.30	1.47	1.79
777.5	25	10.68	5.95	4.48	1.58	1.93
802.5	25	10.85	6.04	4.63	1.69	2.07
827.5	25	11.03	6.14	4.80	1.81	2.21
852.5	25	11.18	6.23	4.94	1.92	2.34
877.5	25	11.22	6.25	4.94	1.93	2.37
902.5	25	11.27	6.28	4.95	1.95	2.38
927.5	25	11.31	6.30	4.95	1.96	2.41
952.5	25	11.35	6.32	4.95	1.98	2.42
977.5	25	11.39	6.34	4.95	1.99	2.45
1002.5	25	11.43	6.36	4.95	2.00	2.47
1027.5	25	11.48	6.38	4.96	2.01	2.50
1052.5	25	11.52	6.39	4.96	2.02	2.53
1077.5	25	11.56	6.41	4.96	2.03	2.56
	∞	11.60	6.42	4.96	2.05	2.58

TABLE 4

PHASE AND GROUP VELOCITIES (KM/SEC) FOR RAYLEIGH WAVES

	T, sec	R_{11} C	R_{11} U	R_{21} C	R_{21} U	R_{12} C	R_{12} U
Continent	300	5.083	3.849				
	250	4.788	3.614				
	200	4.482	3.562	6.482	5.351		
	150	4.226	3.663	6.122	5.121		
	100	4.053	3.807	5.610	4.534	6.479	5.378
	50	3.948	3.830	4.846	4.214	5.442	4.379
Shield	300	5.001	3.784				
	250	4.718	3.625				
	200	4.454	3.677	6.268	5.616		
	150	4.259	3.851	6.017	5.093		
	100	4.158	4.056	5.498	4.500	6.361	5.705
	50	4.129	4.066	4.856	4.284	5.354	4.511
Ocean	300	5.075	3.832				
	250	4.769	3.559				
	200	4.457	3.547	6.277	5.575		
	150	4.215	3.705	6.010	5.062		
	100	4.075	3.909	5.489	4.477	6.377	5.806
	50	4.036	4.041	4.751	4.121	5.327	4.467

tion was somewhat unclear. The formulation of the entire problem *ab initio* in terms of the source constants U_0 and dS, and the discovery that a fault with arbitrary orientation is equivalent to a linear combination of three basic faults (Ben-Menahem and

TABLE 5

PHASE AND GROUP VELOCITIES (KM/SEC) FOR LOVE WAVES

	T, sec	L_0		L_1		L_2		L_3	
		C	U	C	U	C	U	C	U
Continent	300	5.168	4.269						
	250	4.987	4.226						
	200	4.811	4.210	6.621	5.534				
	150	4.645	4.210	6.214	4.981				
	100	4.489	4.199	5.574	4.396	6.512	5.383		
	50	4.299	4.014	4.818	4.208	5.404	4.298	5.981	4.598
Shield	300	5.189	4.408						
	250	5.038	4.390						
	200	4.894	4.398	6.410	6.035				
	150	4.763	4.419	6.096	4.879				
	100	4.646	4.434	5.495	4.444	6.399	5.661		
	50	4.510	4.269	4.821	4.265	5.362	4.432	5.840	4.492
Ocean	300	5.168	4.309						
	250	4.998	4.282						
	200	4.837	4.289	6.418	6.227				
	150	4.691	4.319	6.145	4.968				
	100	4.569	4.362	5.529	4.411	6.417	6.078		
	50	4.478	4.407	4.808	4.246	5.403	4.338	5.897	4.510

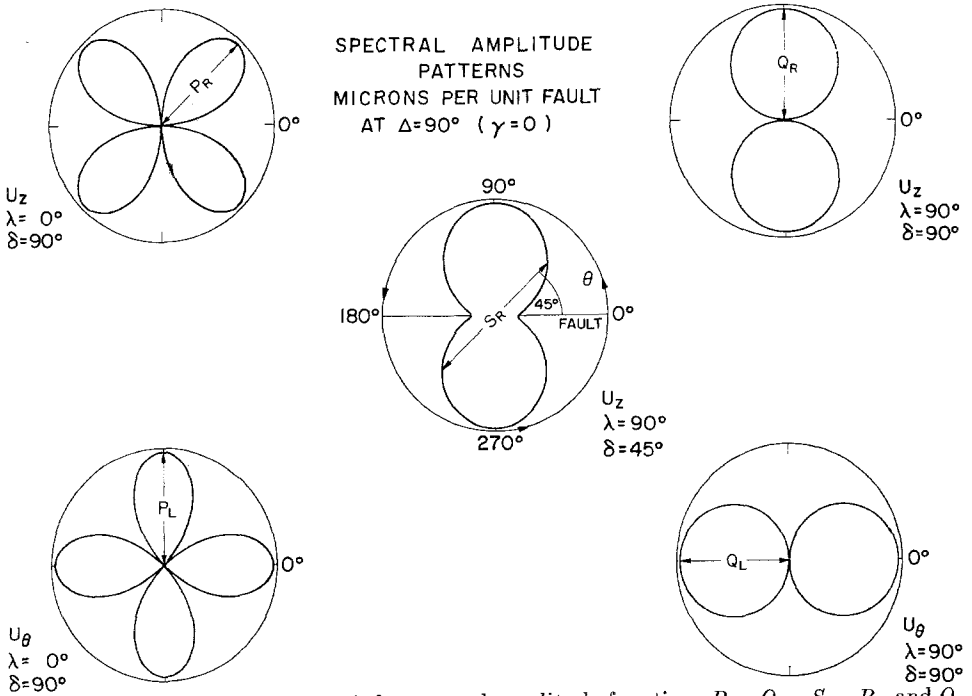

FIG. 1. The geometrical meaning of the spectral amplitude functions P_R, Q_R, S_R, P_L and Q_L. Amplitudes are given in arbitrary units.

Singh, 1968a) simplified the interpretation of the ensuing expressions. Consequently, the newly-defined functions P_R, Q_R, S_R, P_L and Q_L have a simple physical meaning as is illustrated in Figure 1. These functions were tabulated and plotted. The results are shown in Tables 7 to 31 and Figures 2 to 11. Depth in these tables and figures refers to the source's depth.

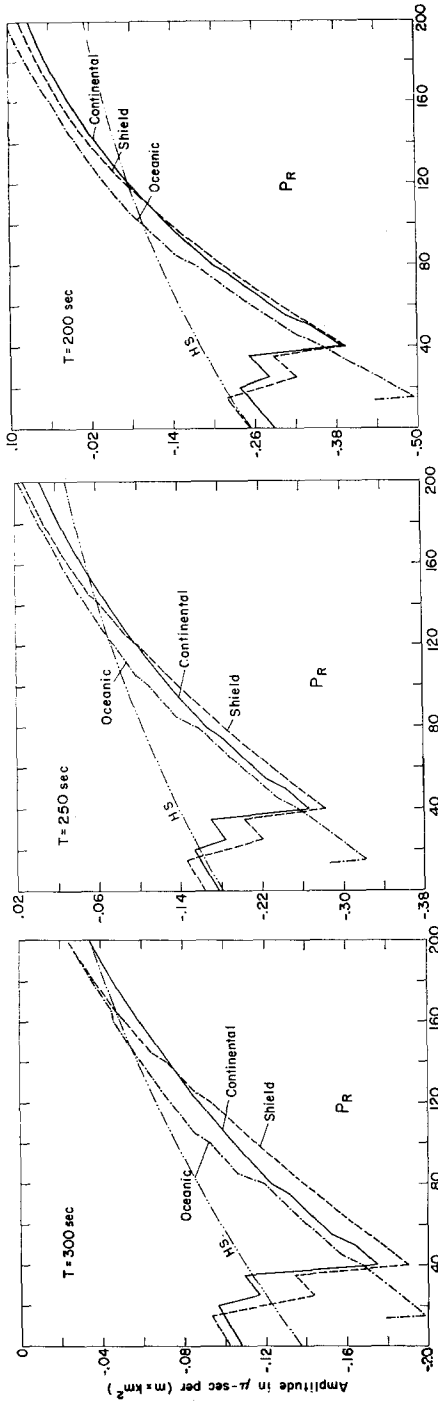

FIG. 2. Dependence of vertical Rayleigh-wave displacement spectrum of mode R_{11} on source depth at three given periods. Source is a strike-slip shear dislocation. Effect of earth structure on the amplitudes is shown. The *HS curve* corresponds to an exact solution obtained for a homogeneous half-space with average parameters.

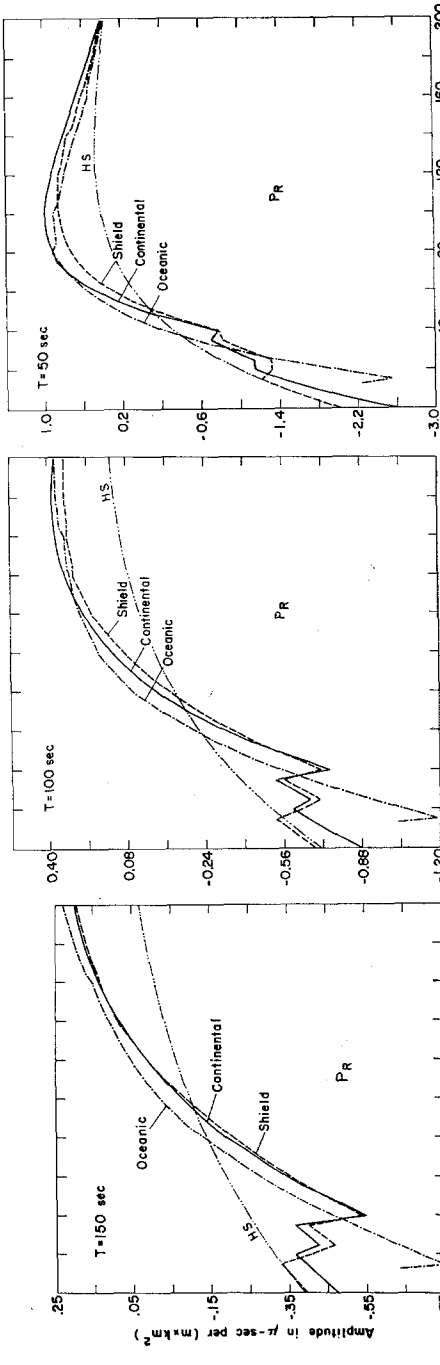

FIG. 3. Dependence of vertical Rayleigh-wave displacement spectrum of mode R_{11} on source depth at three given periods.

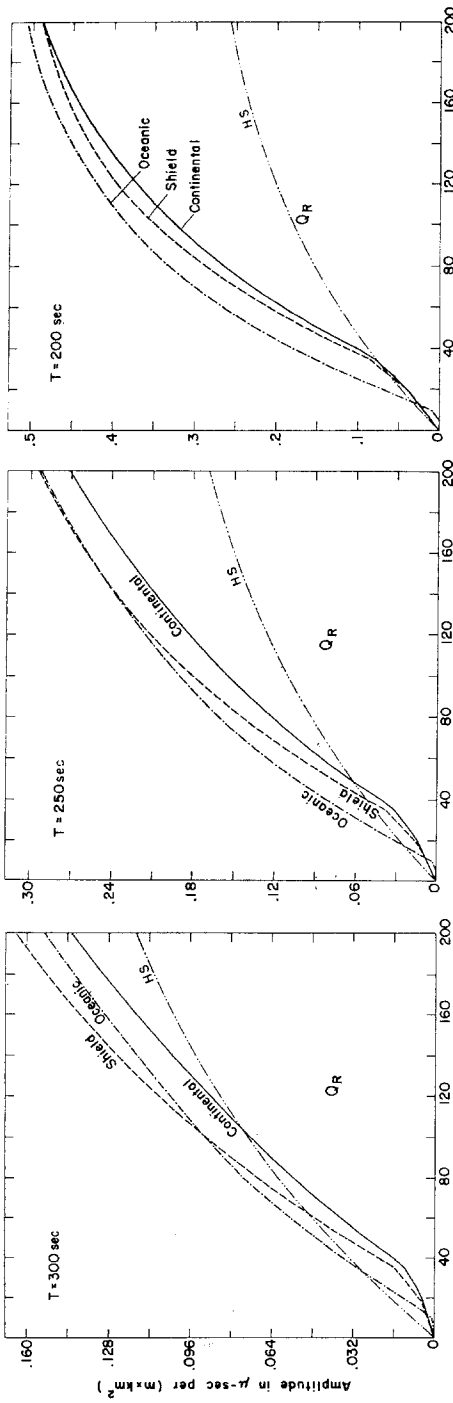

FIG. 4. Dependence of vertical Rayleigh-wave displacement spectrum of mode R_{11} on source depth at three given periods. Source is a dip-slip shear dislocation.

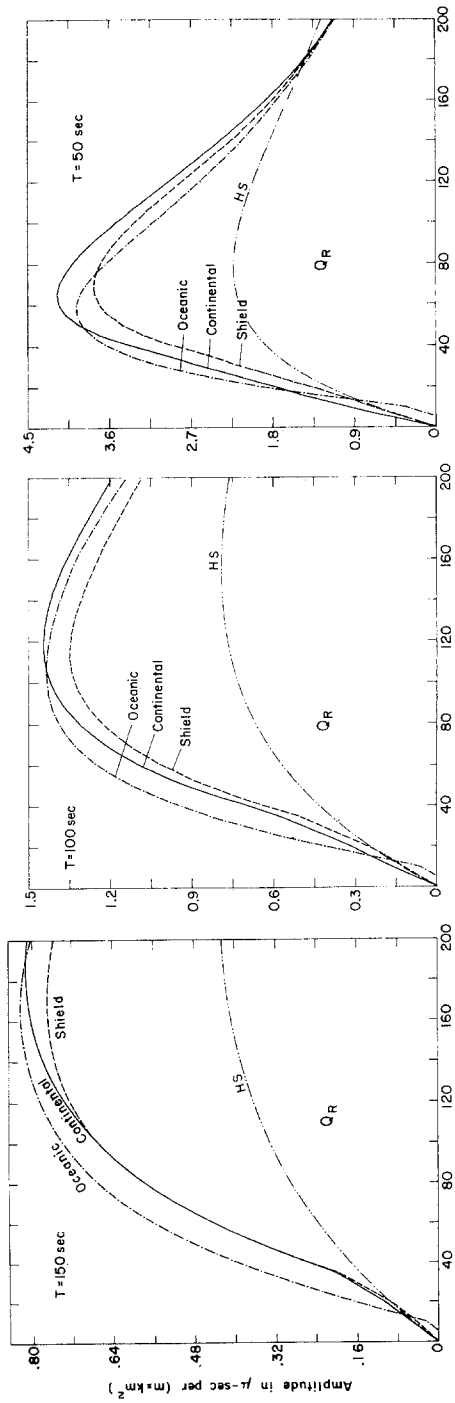

FIG. 5. Dependence of vertical Rayleigh-wave displacement spectrum of mode R_{11} on source depth at three given periods.

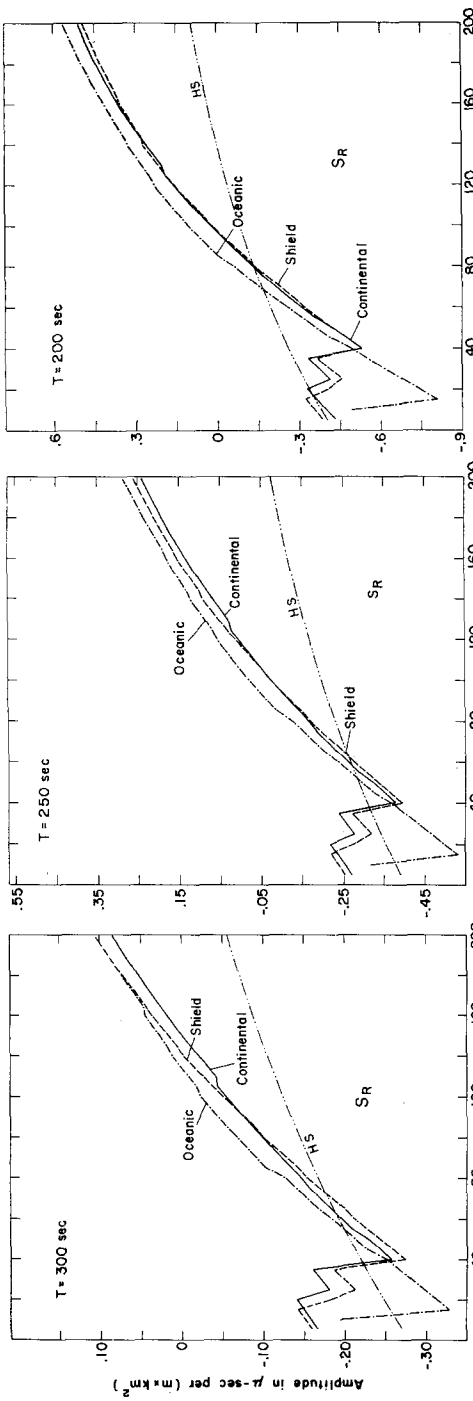

FIG. 6. Dependence of vertical Rayleigh-wave displacement spectrum of mode R_{11} on source depth at three given periods. Source is a dip-slip shear dislocation on a 45° dipping plane.

FIG. 7. Dependence of vertical Rayleigh-wave displacement spectrum of mode R_{11} on source depth at three given periods.

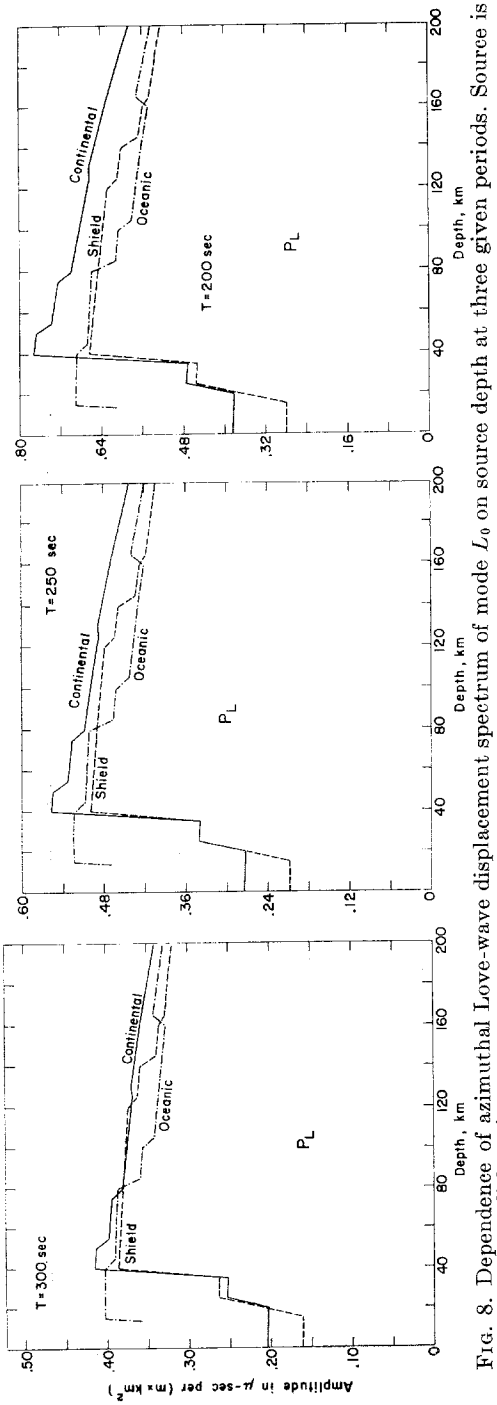

FIG. 8. Dependence of azimuthal Love-wave displacement spectrum of mode L_0 on source depth at three given periods. Source is a strike-slip shear dislocation.

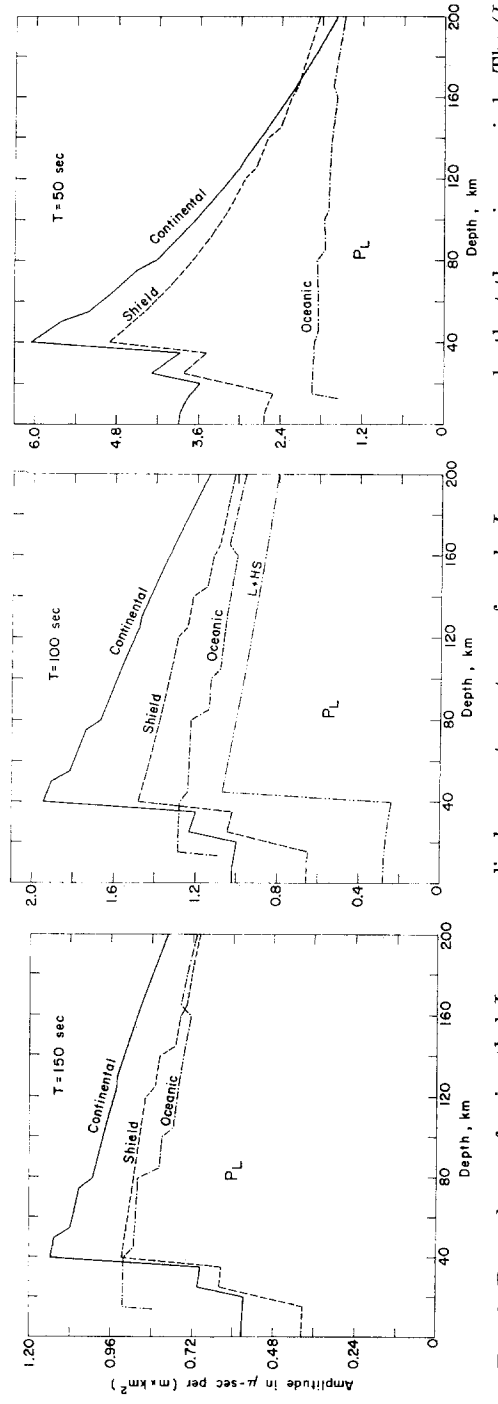

FIG. 9. Dependence of azimuthal Love-wave displacement spectrum of mode L_0 on source depth at three given periods. The (L + HS) *curve* corresponds to an exact solution obtained for a homogeneous layer overlying a homogeneous half-space, with chosen average parameters.

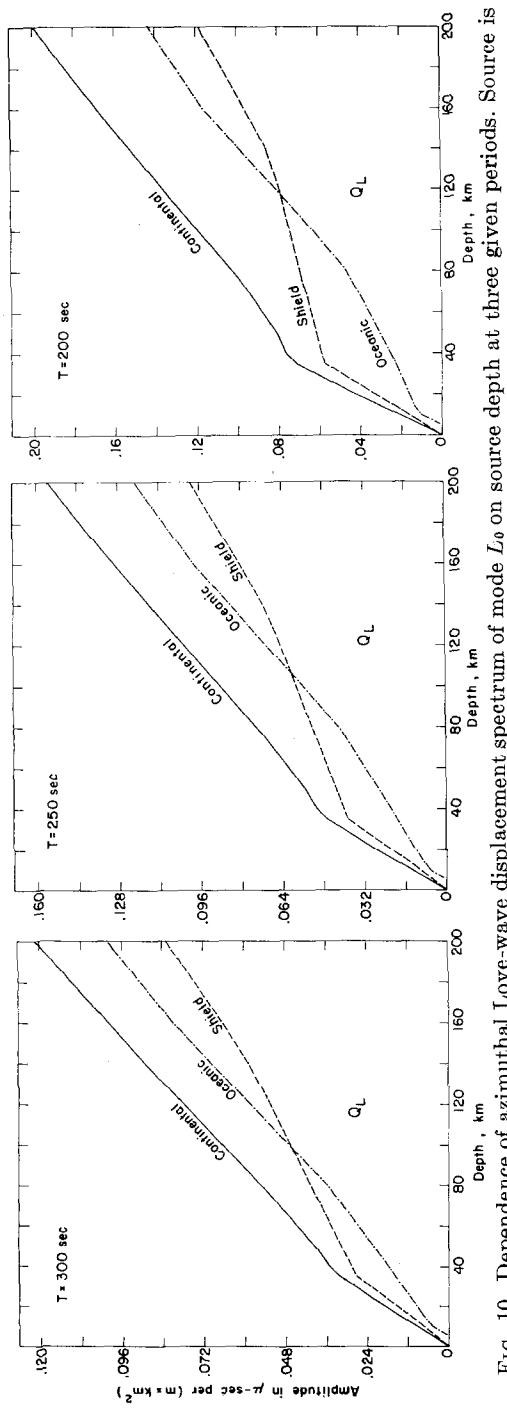

FIG. 10. Dependence of azimuthal Love-wave displacement spectrum of mode L_0 on source depth at three given periods. Source is a dip-slip shear dislocation.

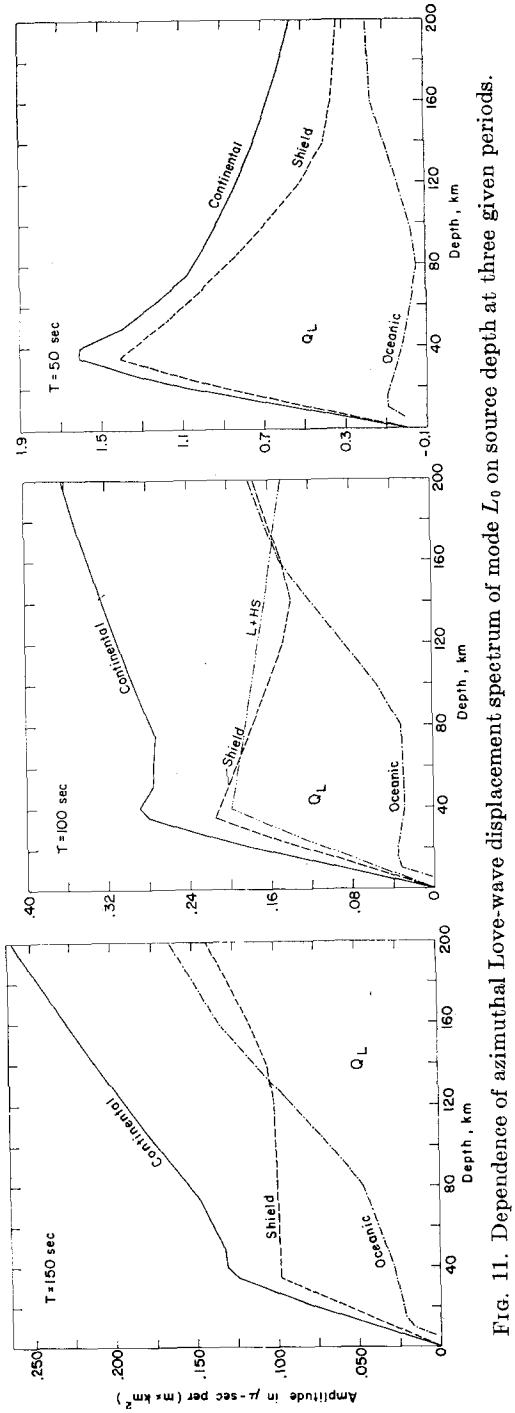

FIG. 11. Dependence of azimuthal Love-wave displacement spectrum of mode L_0 on source depth at three given periods.

The effects of the source's finiteness and motion are summarized in Tables 32 and 33 and Figures 12 to 13. The finiteness factor is that given in Ben-Menahem (1961), namely $\sin x/x$ where $x = \omega b/2C_R(C_R/v - \cos\theta) = \pi\tau/T(1 - v/C_R\cos\theta)$ $\tau = b/v =$ rupture time. In Tables 32 and 33 we have calculated the dependence of $\sin x/x$ on τ/T

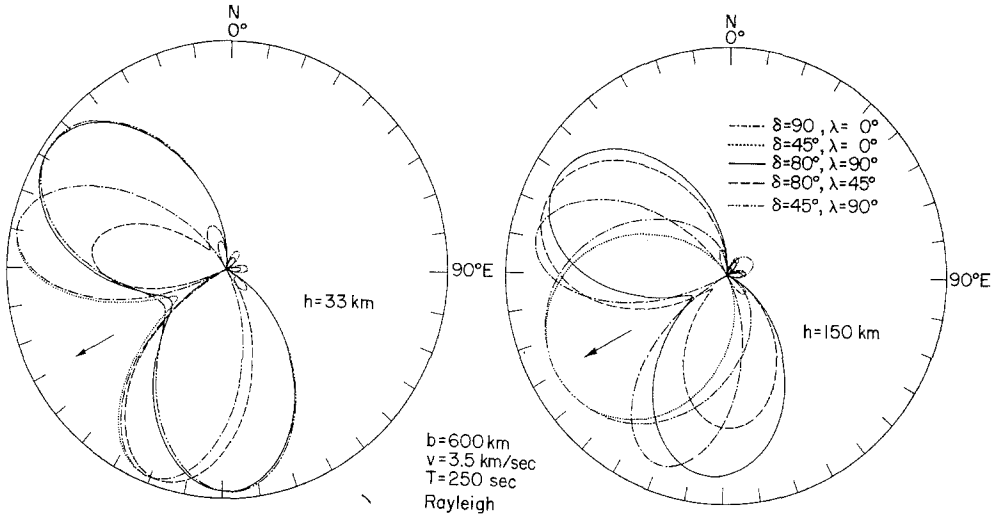

FIG. 12. Effect of source's motion and finiteness on the spectral radiation-pattern of Rayleigh waves. *Arrow* shows direction of moving fault.

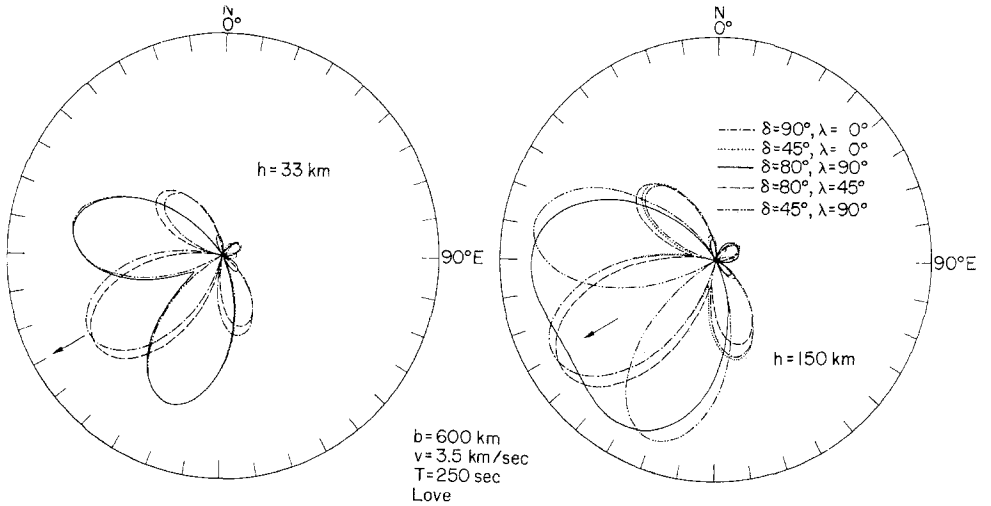

FIG. 13. Effect of the source's motion and finiteness on the spectral radiation pattern of Love waves.

and θ for a fixed rupture velocity $v = 3$ km/sec and two periods. ($T = 250$ sec $C_R \sim C_L = 4.9$ km/sec and $T = 100$ sec, $C_R \sim C_L = 4.3$ km/sec).

Tables 6 to 33 could be used in the following manner. Assume the availability of isolated Love and Rayleigh signals from a net of stations around an event of known focal depth. After the signals have been Fourier-analyzed, instrumental correction is made in the usual way. One then compensates for diminution with the aid of Table 6. The resulting observed amplitude radiation patterns are plotted for the periods 300,

TABLE 6
DIMINUTION FACTOR OF SURFACE-WAVE SPECTRA

$10^{-3}\Delta$, km		$\sqrt{\sin\Delta}\exp[\gamma(T)\Delta]$								
	T, sec	300	250	200	150-R	150-L	100-R	100-L	50-R	50-L
	$10^{4}\gamma$, km^{-1}	0.157	0.200	0.246	0.366	0.421	0.530	0.670	1.240	1.370
6		.988	1.014	1.043	1.120	1.158	1.236	1.345	1.893	2.046
8		1.105	1.144	1.187	1.307	1.366	1.490	1.667	2.630	2.918
10	R_1	1.170	1.221	1.279	1.442	1.524	1.699	1.954	3.456	3.935
12		1.177	1.240	1.310	1.513	1.617	1.842	2.179	4.318	5.048
14		1.120	1.190	1.269	1.501	1.622	1.889	2.298	5.104	6.123
16		.985	1.056	1.136	1.377	1.504	1.790	2.240	5.575	6.864
18		.737	.797	.866	1.074	1.187	1.443	1.857	5.180	6.545
20		-	-	-	-	-	-	-	-	-
22		.785	.863	.955	1.244	1.405	1.784	2.428	8.507	11.323
24		1.117	1.239	1.384	1.845	2.108	2.736	3.828	15.034	20.539
26		1.352	1.513	1.705	2.329	2.690	3.568	5.135	22.602	31.691
28		1.512	1.707	1.942	2.718	3.173	4.301	6.366	31.403	45.192
30	R_2	1.600	1.822	2.092	2.998	3.540	4.904	7.463	41.264	60.947
32		1.610	1.849	2.143	3.146	3.755	5.317	8.322	51.568	78.171
34		1.532	1.775	2.076	3.122	3.768	5.452	8.776	60.948	94.823
36		1.348	1.575	1.859	2.863	3.494	5.167	8.553	66.571	106.300
38		1.008	1.189	1.416	2.233	2.756	4.165	7.090	61.851	101.365
40		-	-	-	-	-	-	-	-	-
42		1.073	1.288	1.562	2.586	3.263	5.150	9.271	101.588	175.374
44		1.528	1.848	2.263	3.837	4.895	7.896	14.619	179.532	318.095
46		1.849	2.257	2.789	4.844	6.248	10.299	19.610	269.902	490.811
48		2.069	2.547	3.176	5.650	7.369	12.415	24.311	374.998	699.889
50	R_3	2.189	2.718	3.421	6.234	8.221	14.154	28.503	492.749	943.881
52		2.202	2.759	3.505	6.541	8.722	15.347	31.782	615.784	1210.630
54		2.096	2.649	3.395	6.491	8.751	15.737	33.515	727.782	1468.507
56		1.843	2.350	3.040	5.953	8.115	14.913	32.663	794.921	1646.229
58		1.379	1.773	2.315	4.644	6.401	12.021	27.077	738.544	1569.764
60		-	-	-	-	-	-	-	-	-

TABLE 6—*Continued*

$10^{-3}\Delta$, km		$\sqrt{\sin\Delta}\exp[\gamma(T)\Delta]$						
	T, sec	300	250	200	150-R	150-L	100-R	100-L
	$10^{4}\gamma$, km^{-1}	0.157	0.200	0.246	0.366	0.421	0.530	0.670
62		1.469	1.921	2.555	5.377	7.578	14.864	35.409
64		2.090	2.758	3.702	7.979	11.369	22.791	55.833
66		2.530	3.367	4.562	10.071	14.510	29.727	74.894
68		2.830	3.800	5.195	11.749	17.116	35.835	92.845
70	R_4	2.994	4.055	5.596	12.962	19.093	40.854	108.853
72		3.013	4.116	5.732	13.600	20.257	44.296	121.376
74		2.867	3.951	5.553	13.496	20.325	45.422	127.995
76		2.522	3.505	4.972	12.377	18.847	43.044	124.739
78		1.886	2.645	3.786	9.655	14.865	34.696	103.403
80		-	-	-	-	-	-	-
82		2.009	2.866	4.180	11.181	17.601	42.906	135.236
84		2.859	4.114	6.054	16.590	26.406	65.785	213.235
86		3.461	5.023	7.461	20.940	33.702	85.805	286.026
88		3.871	5.669	8.497	24.428	39.752	103.434	354.579
90	R_5	4.096	6.050	9.152	26.950	44.345	117.919	415.715
92		4.122	6.140	9.375	28.278	47.047	127.854	463.537
94		3.922	5.894	9.083	28.061	47.206	131.102	488.812
96		3.449	5.229	8.132	25.734	43.772	124.238	476.372
98		2.580	3.946	6.193	20.073	34.524	100.141	394.881
100		-	-	-	-	-	-	-
102		2.749	4.276	6.836	23.249	40.881	123.849	516.496
104		3.911	6.137	9.903	34.495	61.331	189.884	814.371
106		4.734	7.494	12.203	43.541	78.275	247.669	1092.357
108		5.296	8.457	13.898	50.792	92.327	298.550	1354.160
110	R_6	5.603	9.025	14.969	56.036	102.994	340.359	1587.634
112		5.638	9.160	15.334	58.796	109.269	369.031	1770.258
114		5.365	8.793	14.855	58.345	109.636	378.406	1866.774
116		4.719	7.800	13.300	53.505	101.661	358.589	1819.247
118		3.530	5.886	10.128	41.735	80.180	289.031	1507.993
120		-	-	-	-	-	-	-

TABLE 7

R_{11} (μ-SEC/UNIT FAULT), T = 300 SEC

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
10	-102.35	- 96.53	-119.71	2.49	2.82	1.04	-158.45	-151.54	-193.46
15	- 99.46	- 93.58	-199.17	3.74	4.23	6.50	-149.61	-142.65	-329.55
20	- 96.59	-119.60	-192.72	5.00	6.24	12.69	-140.80	-182.42	-313.44
25	-117.21	-144.24	-186.76	6.99	9.20	18.78	-181.19	-213.04	-298.30
30	-113.66	-139.45	-180.39	9.43	12.42	24.74	-170.92	-199.81	-282.55
33	-111.54	-136.61	-176.67	10.89	14.33	28.24	-164.80	-191.93	-273.24
35	-110.15	-134.73	-174.22	11.86	15.59	30.54	-160.76	-186.72	-267.09
40	-175.48	-190.83	-168.15	16.19	22.17	36.21	-258.37	-275.16	-251.88
45	-169.68	-183.93	-157.29	21.69	28.61	41.49	-243.94	-259.33	-227.21
50	-163.99	-177.17	-151.60	27.06	34.87	46.64	-229.76	-243.07	-212.83
55	-152.49	-170.51	-146.01	32.05	40.98	51.68	-209.96	-227.07	-198.65
60	-147.21	-163.99	-140.52	36.93	46.90	56.59	-196.48	-211.38	-184.73
65	-142.01	-157.56	-135.10	41.71	52.76	61.33	-183.22	-199.24	-167.41
70	-136.90	-151.24	-129.79	46.39	58.44	65.95	-170.16	-183.99	-153.91
75	-131.88	-145.03	-124.55	50.97	63.99	70.46	-157.31	-168.98	-140.61
80	-123.02	-138.96	-119.42	55.39	69.35	74.85	-147.14	-154.28	-127.56
85	-118.36	-132.96	-106.58	59.72	74.66	78.76	-134.89	-142.88	-103.76
90	-113.78	-127.08	-102.06	63.98	79.82	82.58	-122.82	-128.60	- 91.81
95	-109.30	-121.31	- 97.62	68.13	84.83	86.32	-111.00	-114.55	- 80.05
100	-104.89	-115.66	- 93.27	72.22	89.69	89.97	- 99.33	-100.80	- 68.51
105	-100.57	-110.08	- 85.62	76.22	94.50	93.48	- 87.90	- 90.72	- 55.46
110	- 96.33	-104.62	- 81.66	80.15	99.16	96.92	- 76.62	- 77.37	- 44.72
115	- 92.18	- 99.26	- 77.77	84.00	103.70	100.29	- 65.59	- 64.25	- 34.14
120	- 88.11	- 94.02	- 73.97	87.77	108.08	103.59	- 54.74	- 51.41	- 23.80
125	- 84.12	- 86.55	- 70.24	91.48	112.32	106.95	- 44.09	- 38.52	- 18.48
130	- 80.90	- 81.69	- 66.59	95.31	116.42	110.24	- 42.50	- 26.44	- 8.46
135	- 77.04	- 76.92	- 63.02	99.05	120.41	113.47	- 32.10	- 14.58	1.38
140	- 73.26	- 72.26	- 59.54	102.73	124.27	116.64	- 21.87	- 2.99	10.99
145	- 69.57	- 64.40	- 56.12	106.34	128.05	119.83	- 11.89	4.37	16.95
150	- 65.96	- 60.29	- 52.79	109.89	131.72	122.97	- 2.08	15.01	26.21
155	- 62.44	- 56.26	- 49.54	113.38	135.30	126.06	7.51	25.43	35.28
160	- 59.00	- 52.34	- 46.39	116.80	138.79	129.09	16.88	35.59	44.12
165	- 55.65	- 47.70	- 45.38	120.17	142.22	132.26	26.05	43.68	46.77
170	- 52.39	- 44.07	- 42.09	123.48	145.57	135.36	35.01	53.24	55.76
175	- 49.21	- 40.53	- 38.87	126.73	148.84	138.41	43.76	62.59	64.56
180	- 46.12	- 37.09	- 35.75	129.93	152.02	141.39	52.30	71.69	73.12
185	- 43.12	- 33.81	- 32.70	133.08	155.15	144.34	60.62	80.46	80.64
190	- 40.20	- 30.52	- 29.74	136.18	158.21	147.24	68.74	89.20	88.81
195	- 37.37	- 27.32	- 26.87	139.23	161.19	150.09	76.65	97.72	96.79

TABLE 7—*Continued*

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
200	-34.63	-24.22	-24.09	142.23	164.10	152.88	84.32	106.00	104.52
210	-30.50	-18.29	-18.76	148.33	169.76	158.34	95.48	121.93	119.43
220	-25.09	-12.65	-13.78	154.23	175.16	163.61	110.37	137.10	133.48
230	-20.04	- 7.36	- 9.12	159.94	180.35	168.73	124.39	151.51	146.72
240	-15.35	- 2.32	- 4.82	165.47	185.31	173.69	137.55	165.23	159.09
250	-11.01	2.38	- .86	170.84	190.09	178.54	149.82	178.12	170.64
260	- 7.01	6.72	2.76	176.16	194.68	183.25	160.56	190.12	181.32
270	- 2.78	10.72	6.12	181.29	199.12	187.88	172.25	201.29	191.36
280	1.10	14.36	9.11	186.27	203.40	192.40	183.08	211.58	200.49
290	4.62	17.66	11.82	191.11	207.56	196.85	193.02	221.02	208.91
300	7.79	20.61	14.15	195.83	211.60	201.24	202.09	229.58	216.40
310	10.59	23.20	16.20	200.45	215.55	205.58	210.28	237.30	223.17
320	13.04	25.45	17.85	204.98	219.41	209.89	217.58	244.13	228.98
330	15.13	27.34	19.23	209.43	223.22	214.18	224.00	250.11	234.08
340	16.86	28.88	20.20	213.83	226.97	218.46	229.54	255.21	238.18
350	18.22	30.06	21.57	218.19	230.75	222.75	234.18	258.25	241.55
360	24.95	30.89	22.06	222.02	234.52	227.04	250.03	261.58	244.32
370	27.66	33.25	23.09	225.68	238.12	231.32	256.91	267.24	247.68
380	30.03	35.90	24.14	229.22	241.50	235.56	262.98	273.52	250.98
390	32.06	36.65	24.10	232.65	244.85	239.84	268.22	276.02	252.28
400	33.75	39.94	29.24	235.99	248.08	243.65	272.64	281.85	264.73
410	35.10	40.65	30.07	239.25	251.28	247.44	276.25	284.28	267.51
420	36.12	43.80	36.39	242.46	254.39	250.91	279.03	290.42	281.89
430	36.79	44.48	38.28	245.63	257.41	253.99	281.00	292.78	286.53
440	37.13	50.54	43.31	248.78	259.99	256.77	282.16	311.04	298.05
450	37.13	58.04	49.39	251.92	261.73	259.01	282.50	325.19	209.80
460	47.85	60.36	52.25	254.10	263.00	260.86	303.11	329.98	315.64
470	49.60	62.70	55.00	256.13	264.10	262.50	306.68	334.48	320.99
480	51.06	64.52	57.31	258.06	265.06	263.97	309.56	338.07	325.56
490	52.22	66.05	59.33	259.88	265.89	265.28	311.73	341.02	329.46
500	53.09	67.73	61.35	261.63	266.59	266.44	313.21	343.84	332.93
510	53.66	68.79	62.86	263.33	267.20	267.48	314.00	345.66	335.65
520	53.95	69.90	64.32	264.97	267.73	268.40	314.11	347.30	337.98
530	53.95	70.48	65.33	266.60	268.18	269.22	313.55	348.00	339.53
540	53.65	70.80	66.07	268.22	268.58	269.96	312.30	348.09	340.46
550	53.08	72.24	67.10	269.85	268.83	270.61	310.39	349.92	341.70
560	64.52	72.24	67.41	270.34	269.06	271.22	331.21	349.21	341.61
570	65.44	73.48	68.08	270.72	269.21	271.76	332.04	350.50	341.95
580	66.13	73.19	67.97	271.02	269.28	272.27	332.33	349.05	340.89
590	66.57	72.66	67.60	271.24	269.35	272.77	332.09	347.04	339.25
600	66.79	73.45	67.65	271.41	269.31	273.24	331.30	347.18	338.14

TABLE 8

R_{11} (μ-SEC/UNIT FAULT), T = 250 SEC

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
10	-165.11	-151.66	-196.38	7.29	7.53	3.28	-253.34	-236.32	-315.49
15	-159.04	-145.79	-323.09	10.88	11.24	15.91	-235.67	-219.46	-531.09
20	-153.04	-184.66	-309.01	14.45	16.21	29.90	-218.14	-277.64	-497.25
25	-183.91	-220.57	-295.84	19.47	23.10	43.51	-278.21	-320.13	-465.25
30	-176.52	-211.12	-282.14	25.38	30.44	56.69	-257.78	-295.11	-432.58
33	-172.14	-205.52	-274.15	28.89	34.76	64.36	-245.65	-280.27	-413.36
35	-169.27	-201.84	-268.88	31.19	37.58	69.39	-237.67	-270.50	-400.68
40	-266.53	-282.53	-255.93	40.69	51.11	81.64	-380.67	-396.25	-369.51
45	-254.49	-268.98	-235.93	52.38	64.22	92.98	-351.86	-366.03	-324.41
50	-242.74	-255.77	-223.94	63.67	76.83	103.91	-323.72	-335.48	-295.34
55	-222.66	-242.85	-212.21	74.11	88.98	114.46	-288.00	-305.60	-266.84
60	-211.89	-230.27	-200.77	84.22	100.63	124.61	-261.65	-276.52	-239.06
65	-201.37	-217.92	-189.52	94.01	112.03	134.29	-235.88	-252.90	-206.31
70	-191.08	-205.87	-178.54	103.48	122.96	143.61	-210.66	-224.97	-179.69
75	-181.03	-194.10	-167.79	112.64	133.48	152.58	-186.01	-197.67	-153.61
80	-165.97	-182.64	-157.32	121.46	143.54	161.19	-166.61	-171.10	-128.19
85	-156.78	-171.40	-137.19	129.98	153.36	168.86	-143.44	-149.48	- 89.88
90	-147.81	-160.44	-128.13	138.25	162.76	176.25	-120.78	-123.99	- 67.07
95	-139.10	-149.73	-119.28	146.24	171.77	183.39	- 98.74	- 99.07	- 44.74
100	-130.56	-139.31	-110.68	154.02	180.37	190.26	- 77.12	- 74.84	- 23.00
105	-122.28	-129.09	- 98.48	161.52	188.77	196.82	- 56.10	- 55.90	- 1.23
110	-114.18	-119.13	- 90.79	168.82	196.79	203.16	- 35.51	- 32.66	18.66
115	-106.33	-109.41	- 83.29	175.86	204.45	209.30	- 15.52	- 9.95	38.09
120	- 98.68	- 99.95	- 76.01	182.70	211.73	215.22	4.01	12.12	56.96
125	- 91.24	- 88.42	- 68.91	189.32	218.68	221.16	23.02	32.63	68.45
130	- 84.68	- 79.79	- 62.02	196.07	225.30	226.89	29.51	53.06	86.49
135	- 77.57	- 71.37	- 55.32	202.59	231.62	232.45	47.85	72.99	104.05
140	- 70.65	- 63.20	- 48.85	208.92	237.61	237.81	65.76	92.34	121.07
145	- 63.96	- 52.74	- 42.54	215.04	243.48	243.16	83.09	102.71	132.78
150	- 57.46	- 45.69	- 36.45	221.00	249.10	248.33	99.98	120.05	148.93
155	- 51.17	- 38.84	- 30.55	226.76	254.48	253.34	116.33	136.93	164.61
160	- 45.10	- 32.22	- 24.87	232.35	259.62	258.19	132.18	153.25	179.75
165	- 39.22	- 25.44	- 20.00	237.77	264.63	263.06	147.54	165.47	190.16
170	- 33.56	- 19.43	- 14.06	243.03	269.44	267.75	162.39	180.52	205.54
175	- 28.09	- 13.61	- 8.32	248.13	274.05	272.27	176.76	195.11	220.46
180	- 22.83	- 8.01	- 2.79	253.09	278.45	276.61	190.63	209.17	234.84
185	- 17.77	- 2.56	2.56	257.90	282.69	280.84	204.01	222.89	247.63
190	- 12.91	2.72	7.72	262.57	286.75	284.91	216.90	236.16	261.11
195	- 8.25	7.81	12.68	267.12	290.64	288.84	229.31	248.99	274.14

TABLE 8—*Continued*

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
200	- 3.80	12.69	17.43	271.53	294.35	292.61	241.20	261.32	286.65
210	5.43	22.06	26.40	280.12	301.33	299.79	263.10	284.98	310.36
220	14.05	30.64	34.60	288.17	307.70	306.46	285.63	306.76	332.17
230	21.88	39.00	42.05	295.74	313.52	312.70	306.25	327.86	352.18
240	28.94	46.38	48.75	302.87	318.83	318.54	324.97	346.72	370.32
250	35.21	53.07	54.71	309.62	323.69	324.04	341.79	363.93	386.66
260	43.83	59.06	59.91	315.78	328.14	329.24	361.51	379.43	401.15
270	49.80	64.39	64.88	321.53	332.24	334.16	376.95	393.30	414.83
280	55.02	69.02	68.74	326.95	336.02	338.86	390.61	405.50	426.02
290	59.51	73.00	72.14	332.06	339.54	343.39	402.46	416.09	435.93
300	63.26	76.29	74.59	336.92	342.84	347.78	412.52	425.04	443.65
310	66.28	78.93	76.58	341.59	345.97	352.09	420.81	432.38	450.10
320	68.57	80.90	77.61	346.11	348.97	356.36	427.32	438.09	454.31
330	70.13	82.21	78.17	350.54	351.89	360.64	432.06	442.19	457.24
340	70.96	82.85	77.75	354.91	354.78	364.97	435.02	444.66	457.90
350	71.06	82.82	79.04	359.28	357.75	369.20	436.21	444.14	459.62
360	88.49	82.13	77.59	361.50	360.78	373.54	470.40	443.35	457.45
370	91.01	85.37	78.08	363.46	363.32	377.80	475.85	449.01	458.22
380	92.90	89.04	78.60	365.23	365.30	381.96	479.28	455.46	458.75
390	94.16	88.11	75.95	366.84	367.32	386.30	481.52	453.08	453.36
400	94.81	93.04	87.85	368.36	368.95	389.06	482.30	459.92	476.42
410	94.85	92.00	86.63	369.82	370.63	391.88	481.64	457.26	473.36
420	94.28	96.39	100.29	371.28	372.15	393.81	479.53	463.64	499.01
430	93.11	95.24	100.86	372.79	373.50	394.69	476.00	460.72	499.00
440	91.32	105.28	109.40	374.38	373.95	394.88	471.02	484.54	514.58
450	88.93	117.56	119.74	376.10	372.55	393.67	464.61	504.97	531.43
460	110.68	119.08	121.98	375.06	370.11	391.57	502.70	506.10	533.69
470	111.23	120.77	124.21	373.87	367.45	389.18	501.71	507.19	535.58
480	111.30	121.58	125.63	372.58	364.60	386.53	499.65	506.71	536.04
490	110.91	121.99	126.63	371.23	361.62	383.69	496.53	505.36	535.56
500	110.06	122.77	127.78	369.85	358.47	380.64	492.38	504.29	534.90
510	108.75	122.54	128.05	368.50	355.26	377.46	487.20	501.50	532.81
520	106.99	122.49	128.34	367.20	351.97	374.17	481.00	498.76	530.47
530	104.79	121.60	127.89	366.00	348.65	370.80	473.78	494.54	526.82
540	102.13	120.37	127.07	364.94	345.34	367.39	465.54	489.54	522.36
550	99.03	121.08	126.90	364.06	341.82	363.89	456.30	487.78	518.86
560	117.74	119.45	125.48	360.64	338.35	360.42	487.34	481.85	513.09
570	116.97	119.93	124.84	357.18	334.81	356.95	482.43	479.49	508.49
580	115.88	117.96	122.86	353.69	331.22	353.50	476.84	472.75	501.51
590	114.47	115.68	120.53	350.22	327.74	350.17	470.58	465.34	493.77
600	112.75	115.54	119.01	346.79	324.11	346.86	463.66	461.56	487.28

TABLE 9

R_{11} (μ-SEC/UNIT FAULT), T = 200 SEC

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
10	-262.56	-229.38	-306.31	20.12	18.58	9.09	-398.57	-354.17	-488.70
15	-249.87	-218.12	-496.22	29.84	27.57	37.69	-363.53	-323.25	-809.28
20	-237.46	-273.09	-466.97	39.34	39.12	68.66	-329.07	-403.26	-741.66
25	-281.55	-322.09	-439.49	51.78	54.45	98.32	-414.27	-457.05	-677.83
30	-266.41	-304.18	-411.65	65.93	70.48	126.59	-374.28	-411.59	-613.98
33	-257.54	-293.68	-395.50	74.22	79.83	142.86	-350.75	-384.85	-576.74
35	-251.73	-286.80	-384.90	79.64	85.91	153.43	-335.34	-367.33	-552.30
40	-389.67	-394.92	-359.01	100.52	113.02	178.86	-533.63	-533.20	-492.66
45	-365.04	-369.51	-323.92	125.34	138.91	202.09	-477.16	-478.24	-414.86
50	-341.23	-344.98	-300.46	148.91	163.44	224.08	-422.60	-423.72	-360.59
55	-306.45	-321.22	-277.70	170.50	186.72	244.94	-359.26	-370.98	-307.95
60	-285.12	-298.32	-255.72	191.05	208.68	264.60	-309.42	-320.24	-257.15
65	-264.47	-276.05	-234.30	210.61	229.80	283.00	-261.19	-277.74	-200.18
70	-244.49	-254.54	-213.58	229.21	249.72	300.32	-214.53	-230.04	-152.56
75	-225.16	-233.71	-193.47	246.87	268.53	316.64	-169.40	-183.92	-106.37
80	-200.29	-213.64	-174.05	263.65	286.18	331.91	-134.39	-139.55	- 61.79
85	-183.08	-194.12	-145.24	279.60	303.08	345.42	- 93.05	-102.35	- 6.09
90	-166.44	-175.28	-129.01	294.77	318.90	358.13	- 53.10	- 60.65	32.51
95	-150.46	-157.02	-113.30	309.14	333.75	370.12	- 14.69	- 20.35	69.88
100	-134.97	-139.43	- 98.18	322.85	347.58	381.35	22.55	18.43	105.88
105	-120.11	-122.33	- 80.79	335.81	360.75	391.95	58.30	49.99	137.66
110	-105.75	-105.81	- 67.73	348.14	372.99	401.92	92.88	86.45	169.46
115	- 91.98	- 89.82	- 55.14	359.78	384.35	411.33	126.03	121.71	200.13
120	- 78.71	- 74.40	- 43.08	370.82	394.81	420.16	158.00	155.62	229.54
125	- 65.97	- 58.19	- 31.43	381.27	404.56	428.82	188.72	184.57	249.24
130	- 54.07	- 44.49	- 20.28	391.69	413.53	436.94	203.70	215.07	276.65
135	- 42.15	- 31.23	- 9.58	401.50	421.78	444.59	232.72	244.51	302.98
140	- 30.70	- 18.47	.63	410.80	429.29	451.73	260.64	272.78	328.12
145	- 19.78	- 6.56	10.43	419.55	436.66	458.68	287.27	284.46	346.37
150	- 9.30	3.97	19.77	427.83	443.44	465.18	312.84	308.75	369.54
155	.67	14.09	28.68	435.62	449.68	471.28	337.20	332.06	391.67
160	10.18	23.76	37.13	442.95	455.38	476.96	360.43	354.32	412.67
165	19.21	32.22	48.38	449.86	460.84	482.20	382.55	369.38	434.76
170	27.79	40.69	57.29	456.35	465.83	486.98	403.56	389.13	456.16
175	35.92	48.77	65.80	462.47	470.39	491.34	423.49	407.98	476.61
180	43.61	56.45	73.88	468.21	474.53	495.28	442.35	425.85	496.02
185	50.85	64.03	81.61	473.61	478.27	498.90	460.15	443.40	513.25
190	57.66	71.08	88.93	478.69	481.64	502.14	476.91	459.76	530.86
195	64.04	77.77	95.87	483.46	484.64	505.03	492.63	475.29	547.57

TABLE 9—*Continued*

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
200	69.98	84.09	102.41	487.94	487.29	507.59	507.30	489.93	563.31
210	86.12	96.16	114.44	495.57	491.62	511.79	541.13	517.69	592.26
220	97.33	106.65	125.00	502.00	494.76	514.89	567.79	541.83	617.68
230	106.98	117.22	134.17	507.40	496.72	517.02	590.70	565.63	639.78
240	115.09	125.62	141.95	511.90	497.71	518.31	609.93	584.81	658.53
250	121.69	132.85	148.40	515.67	497.87	518.92	625.55	601.21	674.08
260	135.70	138.92	153.51	517.57	497.31	518.96	652.80	614.85	686.42
270	141.74	143.88	158.49	518.72	496.15	518.43	666.03	625.85	697.88
280	146.46	147.73	161.24	519.27	494.51	517.57	676.10	634.22	704.58
290	149.85	150.51	163.33	519.34	492.48	516.44	683.02	640.04	709.36
300	151.93	152.22	163.65	519.08	490.19	515.22	686.85	643.32	710.21
310	152.73	152.88	163.30	518.62	487.74	513.97	687.63	644.11	709.14
320	152.25	152.49	161.19	518.09	485.25	512.86	685.39	642.42	704.15
330	150.49	151.06	158.38	517.63	482.80	511.96	680.13	638.24	697.18
340	147.46	148.58	153.81	517.36	480.53	511.46	671.84	631.60	686.27
350	143.16	145.05	152.68	517.42	478.61	510.78	660.54	621.14	679.28
360	172.78	140.47	146.34	512.12	477.08	510.67	712.08	609.47	663.70
370	172.70	142.60	143.68	506.61	474.70	510.54	708.00	609.12	654.01
380	171.69	145.29	140.93	500.96	471.35	510.40	701.84	609.66	643.73
390	169.78	140.42	132.49	495.32	468.37	511.02	693.66	595.92	622.70
400	166.97	144.87	148.98	489.78	464.72	508.32	683.48	597.92	648.82
410	163.28	139.89	142.70	484.44	461.46	506.13	671.31	583.95	631.35
420	158.70	143.06	160.45	479.41	458.14	502.41	657.16	584.07	658.77
430	153.24	137.94	156.87	474.79	454.70	496.83	641.03	569.81	646.03
440	146.88	148.85	165.58	470.69	450.02	490.29	622.89	590.05	656.33
450	139.63	162.63	176.70	467.21	442.30	481.37	602.73	608.84	669.26
460	170.02	161.53	175.88	458.23	432.96	471.06	651.26	601.09	660.91
470	167.31	160.78	175.23	449.31	423.50	460.56	639.70	593.80	652.70
480	164.05	158.96	173.61	440.50	413.97	449.91	627.02	584.71	642.89
490	160.27	156.77	171.57	431.90	404.47	439.24	613.29	574.88	632.32
500	155.97	155.18	169.91	423.56	394.90	428.48	598.52	565.94	622.20
510	151.16	152.40	167.23	415.56	385.45	417.78	582.71	555.04	610.51
520	145.83	149.96	164.74	407.97	376.11	407.16	565.85	544.64	599.07
530	139.99	146.62	161.45	400.86	366.93	396.67	547.94	532.70	586.34
540	133.63	142.96	157.84	394.29	357.98	386.38	528.96	520.18	573.07
550	126.74	141.72	155.20	388.34	348.88	376.15	508.90	511.92	561.49
560	147.83	137.82	151.15	378.35	340.06	366.20	539.97	498.99	547.51
570	144.14	136.44	148.16	368.58	331.33	356.48	526.12	490.52	535.41
580	140.18	132.36	143.71	359.05	322.69	347.00	511.83	477.34	520.82
590	135.97	128.04	138.99	349.82	314.40	337.91	497.14	463.71	505.76
600	131.51	126.18	135.31	340.92	306.05	329.04	482.06	454.48	492.55

TABLE 10

R_{11} (μ-SEC/UNIT FAULT), T = 150 SEC

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
10	-417.35	-348.15	-469.77	54.13	45.05	23.41	-622.83	-529.41	- 741.22
15	-390.25	-326.09	-743.55	79.67	66.43	88.54	-551.05	-470.62	-1197.09
20	-364.18	-401.58	-682.68	104.26	93.06	157.20	-481.62	-574.95	-1060.77
25	-423.33	-464.97	-625.85	134.87	127.24	221.53	-594.47	-634.41	- 933.46
30	-392.16	-430.62	-569.90	168.65	162.30	281.46	-515.12	-549.74	- 809.47
33	-374.17	-410.75	-537.80	188.18	182.48	315.27	-469.17	-500.64	- 738.20
35	-362.53	-397.87	-516.90	200.83	195.53	336.98	-439.38	-468.76	- 691.87
40	-546.14	-533.88	-466.44	246.87	250.41	388.28	-692.90	-671.54	- 580.26
45	-495.40	-485.90	-406.04	299.48	301.71	434.03	-581.26	-570.59	- 499.17
50	-447.16	-440.35	-361.96	348.18	349.22	476.15	-475.45	-472.98	- 351.80
55	-386.78	-396.97	-319.85	391.84	393.26	514.93	-363.64	-380.41	- 259.08
60	-345.21	-355.85	-279.83	432.28	433.79	550.34	-271.05	-293.08	- 171.23
65	-305.65	-316.53	-241.42	469.66	471.78	582.35	-183.18	-218.93	- 77.54
70	-268.03	-279.19	-204.81	504.13	506.62	611.35	- 99.83	-139.97	1.85
75	-232.25	-243.63	-169.79	535.81	538.56	637.57	- 20.78	- 65.14	77.53
80	-192.85	-209.92	-136.45	565.26	567.59	661.00	38.15	5.45	149.34
85	-162.42	-177.68	- 99.49	592.30	594.46	681.23	107.18	65.30	221.11
90	-133.59	-147.04	- 73.34	617.16	618.71	699.42	172.46	129.10	279.27
95	-106.41	-117.85	- 48.47	639.82	640.53	715.72	233.83	189.58	334.46
100	- 80.59	- 90.15	- 24.92	660.60	659.92	730.16	291.99	246.63	386.57
105	- 56.32	- 63.63	- 3.78	679.41	677.52	743.38	346.54	293.89	424.83
110	- 33.33	- 38.40	15.20	696.51	692.93	755.14	398.05	345.60	467.62
115	- 11.76	- 14.32	33.10	711.87	706.28	765.55	446.23	394.66	507.85
120	8.56	8.57	49.86	725.66	717.61	774.64	491.49	441.02	545.42
125	27.65	28.76	65.65	737.95	727.52	783.06	533.85	475.64	571.22
130	46.29	48.15	80.41	749.63	735.74	790.31	558.80	515.03	604.39
135	63.45	66.63	94.19	759.89	742.35	796.50	597.14	552.33	635.27
140	79.54	84.17	106.98	768.88	747.42	801.66	632.96	587.50	663.81
145	94.47	93.98	118.90	776.62	752.51	806.22	666.05	593.66	684.13
150	108.41	107.18	129.90	783.25	756.44	809.89	696.77	621.03	708.62
155	121.29	119.60	140.03	788.80	759.29	812.75	725.02	646.60	731.06
160	133.18	131.23	149.27	793.37	761.10	814.85	750.93	670.33	751.41
165	144.11	139.06	167.94	797.03	762.54	815.26	774.58	682.24	784.51
170	154.11	148.44	178.17	799.84	763.14	814.78	796.04	701.37	805.88
175	163.20	157.15	187.68	801.87	762.95	813.46	815.36	718.94	825.56
180	171.40	165.17	196.46	803.20	762.03	811.36	832.60	734.93	843.54
185	178.74	173.23	204.60	803.89	760.37	808.59	847.83	750.73	858.83
190	185.24	180.19	212.07	803.99	758.07	805.13	861.08	764.23	873.81
195	190.92	186.57	218.92	803.58	755.16	801.05	872.41	776.41	887.35

TABLE 10—*Continued*

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
200	195.79	192.38	225.13	802.72	751.71	796.40	881.84	787.27	899.43
210	216.74	203.27	235.87	797.23	743.15	785.50	917.39	807.01	919.66
220	225.63	211.58	244.39	789.79	732.83	772.83	932.49	821.14	934.78
230	231.87	220.62	250.84	780.82	720.61	758.67	941.47	836.06	945.16
240	235.57	226.09	255.33	770.72	707.10	743.39	944.62	843.73	951.03
250	236.83	229.96	257.95	759.89	692.53	727.24	942.17	847.79	952.63
260	252.73	232.32	258.77	745.01	677.18	710.56	964.40	848.42	950.14
270	253.86	233.24	259.84	729.37	661.23	693.24	960.19	845.82	947.49
280	253.10	232.78	257.70	713.22	644.98	675.88	951.75	840.13	938.27
290	250.53	230.99	254.87	696.91	628.57	658.50	939.26	831.46	927.14
300	246.18	227.91	249.67	680.74	612.28	641.56	922.85	819.91	911.00
310	240.09	223.56	243.77	664.98	596.25	625.10	902.57	805.49	892.91
320	232.28	217.95	235.53	649.93	580.73	609.56	878.46	788.28	869.86
330	222.74	211.07	226.49	635.88	565.89	594.89	850.50	768.20	844.64
340	211.45	202.92	215.10	623.10	551.96	581.81	818.63	745.30	814.40
350	198.39	193.46	208.69	611.91	539.21	568.81	782.77	718.43	791.22
360	233.15	182.66	195.14	591.12	527.79	557.53	834.60	689.51	755.54
370	227.16	180.79	186.57	570.72	515.43	546.87	811.79	675.97	728.18
380	220.28	179.67	177.79	550.81	501.98	536.86	787.32	663.61	700.03
390	212.56	169.06	161.59	531.63	489.83	529.02	761.31	633.66	657.87
400	204.00	169.94	176.14	513.31	477.02	516.28	733.73	624.12	673.04
410	194.61	159.53	162.97	496.03	465.48	505.23	704.58	594.89	636.30
420	184.37	158.38	176.91	479.96	454.46	492.66	673.80	582.12	649.56
430	173.25	148.02	167.34	465.26	443.87	478.00	641.31	553.24	619.61
440	161.22	154.75	170.88	452.10	432.26	462.78	607.01	558.99	613.93
450	148.23	164.56	177.03	440.67	416.98	444.91	570.78	565.76	612.07
460	176.16	159.59	171.51	421.63	399.93	425.72	609.16	546.53	589.85
470	169.27	155.19	166.43	403.29	383.24	406.94	585.13	528.52	568.77
480	162.11	149.98	160.72	385.68	366.92	388.56	560.88	509.44	547.04
490	154.71	144.62	154.90	368.91	351.11	370.73	536.48	490.37	525.52
500	147.04	140.04	149.70	353.03	335.63	353.31	511.88	472.89	505.40
510	139.11	134.57	143.86	338.14	320.73	336.49	487.05	454.21	484.66
520	130.90	129.61	138.44	324.28	306.36	320.24	461.92	436.65	465.02
530	122.38	124.05	132.62	311.54	292.55	304.59	436.41	418.34	445.08
540	113.52	118.39	126.77	300.01	279.40	289.61	410.44	400.12	425.48
550	104.29	114.98	121.97	289.76	266.40	275.09	383.92	386.13	408.08
560	118.76	109.54	116.26	275.29	254.05	261.26	400.68	368.82	389.46
570	113.07	106.27	111.60	261.51	242.12	248.03	381.53	355.61	373.01
580	107.39	101.08	106.06	248.40	230.59	235.40	362.72	339.27	355.36
590	101.73	95.84	100.51	236.00	219.71	223.48	344.30	323.08	337.99
600	96.07	92.65	95.92	224.33	209.04	212.08	326.19	310.77	322.61

TABLE 11

R_{11} (μ-SEC/UNIT FAULT), T = 100 SEC

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
10	-726.90	-579.11	- 786.19	168.00	125.83	67.38	-1043.40	- 850.32	-1210.32
15	-658.32	-528.37	-1191.41	244.53	184.03	239.61	- 866.61	- 716.31	-1862.00
20	-594.87	-631.95	-1043.25	316.63	254.38	414.06	- 700.78	- 839.64	-1537.41
25	-667.03	-707.26	- 907.97	402.44	341.41	571.01	- 832.64	- 874.31	-1242.63
30	-594.30	-631.66	- 780.30	493.96	428.29	711.10	- 651.71	- 690.30	- 967.74
33	-553.87	-589.27	- 708.75	545.88	477.40	787.28	- 550.72	- 586.75	- 814.18
35	-528.36	-562.35	- 662.88	579.17	508.81	835.01	- 486.82	- 520.86	- 716.13
40	-753.09	-714.82	- 554.49	692.27	632.66	943.95	- 763.54	- 729.18	- 485.76
45	-634.37	-612.52	- 442.26	813.59	743.71	1036.32	- 513.16	- 519.56	- 248.68
50	-525.05	-518.60	- 354.21	919.93	842.13	1116.59	- 284.59	- 325.82	- 63.91
55	-410.83	-432.14	- 272.68	1010.70	929.16	1185.84	- 71.57	- 149.35	105.57
60	-323.81	-352.96	- 197.52	1089.83	1005.28	1244.55	111.39	10.43	260.34
65	-243.80	-279.85	- 127.49	1158.21	1072.89	1292.97	278.07	144.08	415.00
70	-170.27	-212.84	- 62.59	1216.65	1131.22	1332.38	429.77	276.72	544.98
75	-102.71	-151.25	- 2.15	1265.89	1181.12	1363.49	567.71	396.92	664.72
80	- 42.44	- 94.92	53.99	1309.02	1223.02	1386.71	658.36	505.22	774.76
85	9.35	- 42.94	91.84	1344.95	1258.56	1404.83	765.87	594.69	846.07
90	56.39	4.70	129.89	1374.40	1287.25	1417.79	862.32	683.85	921.82
95	98.79	48.51	164.80	1397.79	1309.68	1426.00	948.08	764.36	990.42
100	137.24	88.64	196.67	1415.86	1326.21	1429.82	1024.67	836.67	1052.15
105	171.68	125.80	212.91	1428.91	1337.98	1432.09	1092.07	894.67	1076.20
110	202.65	159.98	234.07	1437.50	1344.64	1431.37	1151.46	954.28	1116.21
115	230.14	191.61	252.79	1441.99	1346.54	1427.93	1202.97	1008.21	1150.66
120	254.58	220.81	269.13	1442.82	1344.00	1422.11	1247.47	1056.89	1179.73
125	276.09	238.72	283.37	1440.33	1339.13	1414.78	1285.36	1079.03	1195.22
130	298.48	260.57	295.51	1435.71	1330.83	1405.53	1308.04	1113.45	1215.17
135	315.82	280.75	305.70	1428.26	1319.30	1394.58	1337.41	1144.27	1230.69
140	330.83	299.38	314.02	1418.24	1304.81	1382.20	1361.46	1171.83	1241.98
145	343.56	295.71	320.62	1406.02	1291.96	1368.93	1380.38	1147.71	1244.02
150	354.24	305.71	325.52	1391.77	1277.33	1354.62	1394.66	1160.09	1247.78
155	362.95	314.45	328.82	1375.83	1261.02	1339.44	1404.54	1169.70	1247.91
160	369.82	322.00	330.58	1358.42	1243.30	1323.65	1410.31	1176.79	1244.59
165	374.97	321.15	353.26	1339.76	1225.71	1303.48	1412.26	1164.93	1275.07
170	378.48	324.83	357.82	1320.08	1207.19	1282.21	1410.60	1164.51	1275.85
175	380.46	327.55	361.34	1299.56	1187.82	1259.92	1405.55	1162.01	1274.38
180	380.97	329.38	363.88	1278.42	1167.81	1236.87	1397.29	1157.62	1270.88
185	380.09	331.62	365.55	1256.83	1146.94	1213.03	1385.98	1153.81	1264.67
190	377.87	332.14	366.41	1234.98	1125.58	1188.62	1371.75	1146.70	1257.67
195	374.36	331.97	366.51	1213.03	1103.76	1163.67	1354.73	1138.13	1249.12

TABLE 11—*Continued*

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Gontinent	Shield	Ocean
200	369.62	331.16	365.94	1191.20	1081.68	1138.41	1335.05	1128.29	1239.22
210	382.71	329.26	362.95	1140.02	1036.31	1086.79	1333.80	1107.92	1215.69
220	374.88	324.41	357.84	1088.41	990.45	1034.63	1296.28	1081.94	1188.10
230	363.96	322.01	350.92	1037.26	943.46	982.30	1252.60	1060.82	1157.07
240	350.21	315.44	342.47	987.42	896.62	930.49	1203.33	1032.25	1123.33
250	333.80	307.73	332.65	939.73	850.13	879.45	1148.87	1001.70	1087.18
260	340.19	299.08	321.65	886.42	804.49	829.78	1135.34	969.68	1049.10
270	327.21	289.58	312.20	834.56	759.81	780.96	1088.04	936.35	1014.32
280	312.96	279.36	299.88	784.43	716.53	734.01	1038.91	902.04	974.66
290	297.61	268.45	287.83	736.58	674.70	688.73	988.29	866.72	935.81
300	281.17	256.91	274.00	691.38	634.72	645.85	936.19	830.59	894.01
310	263.64	244.70	260.28	649.20	596.64	605.19	882.52	793.46	852.65
320	244.95	231.84	244.78	610.43	560.84	567.45	827.07	755.39	808.22
330	224.99	218.20	229.10	575.48	527.39	532.55	769.51	716.03	763.52
340	203.57	203.77	211.48	544.78	496.68	501.15	709.34	675.31	715.25
350	180.51	188.34	199.48	518.83	468.91	471.13	646.03	632.25	676.44
360	204.09	171.83	180.77	481.38	444.42	444.96	668.54	587.54	625.91
370	191.50	164.41	167.11	446.12	419.83	420.92	626.57	559.00	584.46
380	178.95	158.16	153.44	413.00	394.89	399.08	585.73	532.82	543.08
390	166.47	143.56	133.04	382.23	372.88	381.60	546.05	491.68	489.27
400	154.02	139.46	139.23	353.84	350.99	359.37	507.34	470.32	484.96
410	141.54	125.98	122.70	327.92	331.80	340.62	469.39	432.57	439.07
420	128.93	119.90	126.54	304.59	314.38	321.77	431.93	408.56	430.75
430	116.09	106.97	114.00	283.96	298.53	301.89	394.65	372.78	393.27
440	102.88	106.40	110.59	266.18	282.91	282.88	357.15	361.23	372.97
450	89.15	108.41	109.35	251.44	264.59	262.48	319.03	352.55	356.83
460	101.85	101.29	101.51	230.69	245.31	241.87	329.58	328.39	329.93
470	94.14	94.91	94.40	211.48	227.18	222.60	304.42	306.27	305.27
480	86.76	88.40	87.38	193.71	210.13	204.59	280.65	284.66	281.69
490	79.69	82.14	80.74	177.40	194.23	187.88	258.25	264.19	259.62
500	72.89	76.69	74.84	162.51	179.27	172.26	237.03	245.75	239.63
510	66.32	71.05	68.99	149.02	165.38	157.81	216.86	227.61	220.51
520	59.93	65.97	63.71	136.93	152.48	144.44	197.56	211.02	203.08
530	53.64	60.86	58.59	126.24	140.54	132.08	178.95	194.92	186.59
540	47.40	55.96	53.78	116.97	129.58	120.72	160.82	179.66	171.24
550	41.12	52.42	49.72	109.15	119.17	110.15	142.96	167.30	157.80
560	44.94	48.15	45.57	99.28	109.63	100.47	143.79	154.07	144.70
570	41.08	45.06	42.08	90.25	100.75	91.55	131.40	143.34	133.27
580	37.47	41.37	38.51	81.99	92.47	83.34	119.90	131.95	122.13
590	34.10	37.84	35.16	74.48	84.93	75.87	109.26	121.19	111.78
600	30.92	35.35	32.36	67.68	77.79	68.97	99.38	112.61	102.79

TABLE 12

R_{11} (μ-SEC/UNIT FAULT), T = 50 SEC

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
10	-1753.58	-1447.30	-1929.68	1008.06	722.54	366.76	-2084.01	-1821.73	-2718.08
15	-1419.77	-1218.41	-2562.01	1423.21	1035.72	1200.36	-1220.49	-1201.04	-3545.16
20	-1150.77	-1327.89	-1918.20	1793.99	1391.10	1957.37	- 507.43	-1146.16	-2162.55
25	-1136.55	-1318.07	-1377.72	2200.70	1794.08	2559.72	- 430.04	- 788.59	-1023.45
30	- 880.58	-1031.49	- 919.15	2604.17	2168.84	3027.68	205.95	- 80.89	- 79.85
33	- 762.83	- 890.63	- 681.07	2825.34	2372.03	3251.40	502.77	271.37	400.91
35	- 699.24	- 809.77	- 535.73	2965.38	2499.40	3379.42	665.28	475.71	690.27
40	- 774.34	- 770.81	- 214.58	3367.53	2912.02	3632.45	782.43	663.62	1316.21
45	- 356.16	- 423.16	37.07	3707.33	3225.77	3802.21	1584.91	1328.44	1798.64
50	- 8.13	- 137.46	239.14	3936.22	3453.95	3907.53	2228.41	1860.28	2161.16
55	248.20	96.23	406.05	4082.89	3611.13	3958.61	2657.29	2275.04	2444.16
60	456.04	284.74	543.50	4160.66	3708.60	3963.49	3013.46	2589.56	2661.74
65	623.89	436.37	658.44	4180.93	3760.25	3926.60	3280.83	2803.83	2842.43
70	758.85	555.68	755.12	4153.20	3770.75	3855.93	3476.23	2968.55	2968.69
75	876.14	648.21	838.43	4085.34	3747.59	3755.47	3614.33	3075.32	3067.36
80	902.87	718.05	912.16	4006.11	3697.25	3628.89	3587.20	3134.24	3147.84
85	945.75	769.62	872.06	3905.96	3626.16	3510.83	3604.55	3144.42	3030.56
90	972.29	805.82	887.65	3789.46	3537.20	3383.73	3587.34	3135.11	3010.14
95	985.22	829.75	897.94	3661.36	3433.80	3248.85	3542.32	3101.37	2979.86
100	987.01	843.94	904.46	3523.94	3319.50	3108.16	3474.60	3049.46	2943.55
105	979.64	850.78	853.85	3381.33	3196.67	2987.01	3389.40	2977.85	2802.25
110	964.75	852.21	834.75	3234.81	3066.77	2848.83	3289.96	2905.06	2719.65
115	943.90	850.10	812.78	3087.58	2930.81	2721.09	3180.32	2827.67	2632.23
120	918.17	846.16	788.56	2940.44	2790.46	2596.20	3062.53	2749.91	2541.51
125	888.57	807.49	762.22	2795.10	2655.83	2474.36	2938.99	2611.34	2443.48
130	867.39	791.03	734.22	2651.01	2520.61	2356.33	2824.58	2517.28	2347.63
135	836.43	775.18	704.71	2510.24	2384.60	2242.26	2704.85	2427.56	2249.80
140	803.87	760.99	673.98	2372.41	2248.46	2133.21	2583.95	2344.72	2150.78
145	770.46	693.11	641.83	2239.21	2129.72	2029.00	2463.93	2168.32	2047.45
150	736.37	664.28	608.49	2110.04	2014.98	1930.45	2344.67	2066.67	1945.11
155	702.09	636.36	573.81	1986.06	1903.86	1837.69	2227.54	1969.02	1840.88
160	667.83	609.73	537.85	1867.26	1796.82	1751.61	2112.74	1876.33	1734.96
165	633.74	569.14	540.70	1753.85	1698.01	1658.36	2000.59	1759.95	1697.80
170	599.95	540.06	516.22	1646.01	1604.07	1568.75	1891.23	1667.13	1614.87
175	566.52	511.85	492.08	1543.84	1514.63	1482.60	1784.70	1577.72	1534.15
180	533.47	484.66	468.52	1447.45	1430.04	1400.37	1680.92	1492.12	1456.27
185	500.75	460.26	445.43	1356.95	1348.93	1321.36	1579.71	1413.40	1380.47
190	468.30	435.44	423.05	1272.41	1272.15	1246.06	1480.78	1335.75	1307.88
195	436.00	411.55	401.38	1193.96	1199.35	1174.21	1383.76	1261.37	1238.11

TABLE 12—*Continued*

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
200	403.76	388.68	380.56	1121.87	1130.75	1106.06	1288.34	1190.53	1171.51
210	373.63	347.51	341.13	976.08	1003.40	979.21	1164.50	1061.75	1046.54
220	328.05	308.77	305.02	847.28	890.09	865.25	1021.37	942.98	933.23
230	285.71	278.08	272.03	734.65	787.28	762.83	890.90	844.69	830.59
240	246.05	248.07	242.14	637.59	695.44	671.49	771.08	752.43	738.32
250	208.26	221.09	215.00	555.85	613.20	589.98	659.48	669.82	655.18
260	191.41	196.99	190.46	477.25	539.94	517.80	590.65	596.33	580.59
270	166.54	175.42	170.18	408.57	474.47	453.01	512.68	530.79	517.43
280	144.51	156.21	150.94	348.59	416.27	395.65	444.27	472.66	459.28
290	125.08	139.03	134.34	296.60	364.37	344.48	384.53	420.90	408.71
300	107.88	123.70	118.98	251.72	318.35	299.34	332.23	374.95	362.84
310	92.55	109.91	105.58	213.29	277.46	259.29	286.19	333.88	322.69
320	78.67	97.45	93.00	180.79	241.42	224.28	245.19	297.11	285.85
330	65.80	86.02	81.68	153.85	209.72	193.68	207.94	263.74	252.84
340	53.42	75.37	70.64	132.35	182.24	167.59	173.03	233.11	221.54
350	40.97	65.14	62.78	116.41	158.76	144.09	138.88	204.20	196.99
360	41.86	55.02	53.33	97.80	139.37	124.51	130.31	176.25	170.52
370	35.54	48.85	46.18	81.91	121.61	107.56	110.27	156.05	149.04
380	30.08	43.94	39.56	68.37	105.03	93.07	93.15	138.91	129.29
390	25.40	36.98	31.14	56.90	91.27	82.18	78.59	118.86	106.63
400	21.37	33.68	30.29	47.24	78.58	70.33	66.19	106.60	98.54
410	17.89	28.29	24.33	39.15	68.09	61.03	55.60	91.17	81.71
420	14.84	24.83	22.59	32.46	59.31	52.92	46.47	79.82	73.04
430	12.11	20.18	18.43	27.05	52.02	45.31	38.45	66.85	60.67
440	9.57	17.94	15.96	22.82	45.81	38.92	31.19	58.69	51.87
450	7.10	16.51	14.16	19.78	39.53	32.93	24.33	52.09	44.76
460	7.27	14.10	11.89	16.29	33.55	27.49	22.60	44.32	37.41
470	6.03	12.06	9.98	13.38	28.40	22.90	18.69	37.71	31.25
480	4.98	10.25	8.33	10.96	23.98	19.02	15.43	31.93	26.00
490	4.12	8.67	6.93	8.96	20.22	15.78	12.73	26.97	21.58
500	3.39	7.37	5.78	7.31	16.99	13.06	10.49	22.82	17.92
510	2.78	6.21	4.79	5.95	14.27	10.79	8.62	19.22	14.83
520	2.27	5.24	3.98	4.85	11.96	8.91	7.07	16.19	12.27
530	1.82	4.39	3.28	3.96	10.02	7.34	5.74	13.57	10.12
540	1.43	3.65	2.70	3.28	8.41	6.05	4.60	11.33	8.33
550	1.06	3.11	2.24	2.78	7.02	4.97	3.56	9.57	6.88
560	1.03	2.58	1.84	2.25	5.87	4.09	3.19	7.98	5.66
570	.84	2.19	1.53	1.82	4.90	3.35	2.59	6.72	4.67
580	.68	1.82	1.25	1.47	4.08	2.75	2.10	5.60	3.84
590	.55	1.51	1.03	1.18	3.40	2.25	1.70	4.65	3.15
600	.45	1.28	.85	.95	2.82	1.84	1.38	3.92	2.60

TABLE 13

R_{21} (μ-SEC/UNIT FAULT), T = 200 SEC

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
10	1.01	- 1.57	- .10	.05	-.03	.01	5.34	- .67	1.67
15	1.80	- 1.12	1.12	.13	-.01	.03	8.48	1.05	5.21
20	2.60	- .87	2.40	.24	.02	.05	11.61	2.52	8.95
25	4.23	- .34	3.70	.37	.08	.06	15.97	4.78	12.71
30	5.21	.40	4.99	.52	.15	.07	19.50	7.30	16.45
33	5.79	.85	5.76	.63	.19	.07	21.60	8.80	18.69
35	6.18	1.14	6.27	.70	.23	.07	22.99	9.80	20.18
40	11.76	2.76	7.55	.77	.28	.06	34.49	13.69	23.89
45	13.35	3.84	8.55	.76	.32	.06	39.25	16.73	27.13
50	14.93	4.92	9.78	.75	.35	.05	43.98	19.77	30.74
55	15.89	5.98	11.01	.77	.38	.04	47.68	22.80	34.33
60	17.39	7.04	12.22	.80	.39	.03	52.28	25.79	37.88
65	18.88	8.10	13.43	.84	.40	.01	56.84	28.73	41.45
70	20.36	9.15	14.63	.88	.40	- .01	61.37	31.71	44.97
75	21.83	10.20	15.82	.92	.38	- .04	65.86	34.66	48.46
80	22.56	11.23	17.00	1.02	.36	- .07	69.05	37.59	51.91
85	23.95	12.26	16.92	1.13	.34	- .02	73.38	40.46	53.21
90	25.32	13.28	18.00	1.25	.30	.03	77.66	43.35	56.47
95	26.67	14.29	19.06	1.38	.25	.08	81.87	46.22	59.69
100	28.01	15.29	20.11	1.51	.20	.13	86.04	49.05	62.85
105	29.32	16.29	20.33	1.65	.14	.22	90.14	51.82	64.51
110	30.62	17.27	21.31	1.80	.07	.32	94.19	54.61	67.51
115	31.89	18.25	22.27	1.96	-.01	.42	98.16	57.37	70.46
120	33.13	19.21	23.21	2.12	-.10	.53	102.06	60.09	73.34
125	34.36	19.63	24.13	2.29	-.16	.64	105.89	61.83	76.09
130	35.87	20.54	25.04	2.46	-.23	.75	110.12	64.44	78.88
135	37.05	21.45	25.93	2.65	-.31	.87	113.82	67.03	81.60
140	38.21	22.34	26.79	2.84	-.40	.98	117.45	69.56	84.26
145	39.33	22.05	27.64	3.03	-.40	1.11	120.99	69.88	86.79
150	40.44	22.87	28.46	3.23	-.42	1.24	124.46	72.27	89.32
155	41.51	23.67	29.26	3.44	-.43	1.36	127.83	74.62	91.80
160	42.54	24.46	30.04	3.66	-.45	1.50	131.11	76.91	94.19
165	43.55	24.79	32.38	3.88	-.44	1.52	134.29	78.32	99.32
170	44.53	25.53	33.15	4.11	-.44	1.55	137.38	80.50	101.66
175	45.47	26.26	33.91	4.35	-.43	1.58	140.37	82.63	103.94
180	46.38	26.97	34.64	4.59	-.43	1.61	143.26	84.70	106.15
185	47.25	27.74	35.35	4.84	-.44	1.64	146.05	86.87	108.28
190	48.09	28.41	36.03	5.09	-.44	1.66	148.74	88.84	110.35
195	48.90	29.06	36.69	5.35	-.45	1.69	151.32	90.76	112.36

TABLE 13—*Continued*

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
200	49.66	29.70	37.32	5.62	- .46	1.72	153.78	92.62	114.28
210	53.52	31.00	38.52	5.87	- .49	1.78	162.75	96.34	117.92
220	54.90	32.13	39.61	6.14	- .53	1.84	167.11	99.66	121.24
230	56.12	33.47	40.60	6.43	- .58	1.90	171.04	103.28	124.26
240	57.20	34.45	41.48	6.72	- .65	1.96	174.53	106.13	126.95
250	58.12	35.34	42.26	7.03	- .72	2.02	177.56	108.73	129.32
260	62.10	36.14	42.91	6.97	- .80	2.08	185.91	111.07	131.35
270	62.80	36.85	43.72	6.91	- .89	2.14	188.20	113.14	133.53
280	63.36	37.47	44.15	6.87	- .97	2.20	190.06	114.94	134.89
290	63.76	38.00	44.61	6.82	- 1.07	2.25	191.47	116.46	136.15
300	64.02	38.43	44.81	6.79	- 1.17	2.30	192.44	117.71	136.82
310	64.13	38.77	45.03	6.76	- 1.27	2.36	192.96	118.67	137.38
320	64.09	39.01	44.99	6.74	- 1.37	2.41	193.04	119.35	137.35
330	63.90	39.16	44.97	6.72	- 1.48	2.46	192.66	119.75	137.21
340	63.56	39.21	44.70	6.71	- 1.59	2.52	191.83	119.86	136.47
350	63.07	39.17	45.46	6.70	- 1.70	2.43	190.56	119.67	137.43
360	75.08	39.03	44.96	5.22	- 1.81	2.34	211.51	119.21	136.02
370	74.34	40.58	45.61	3.76	- 2.17	2.15	209.50	121.70	136.55
380	73.50	42.13	46.28	2.31	- 2.80	1.84	207.19	124.11	136.98
390	72.58	41.73	45.44	.88	- 3.42	1.53	204.61	122.87	134.56
400	71.57	43.75	51.83	- .53	- 4.18	.43	201.76	125.96	144.98
410	70.47	43.17	50.72	- 1.92	- 4.92	- .65	198.64	124.20	141.83
420	69.29	45.07	57.65	- 3.28	- 5.73	- 2.17	195.25	126.89	152.83
430	68.03	44.31	56.25	- 4.63	- 6.61	- 4.09	191.60	124.59	148.96
440	66.69	48.43	59.05	- 5.96	- 7.79	- 6.26	187.70	130.53	152.33
450	65.27	52.56	61.92	- 7.26	- 9.64	- 8.95	183.55	136.78	155.94
460	78.60	51.43	60.26	-10.18	-11.80	-11.87	205.44	133.65	151.51
470	76.71	50.54	58.82	-13.04	-13.92	-14.73	200.18	130.93	147.50
480	74.81	49.41	57.22	-15.84	-16.02	-17.52	194.85	127.76	143.14
490	72.90	48.29	55.64	-18.59	-18.08	-20.25	189.47	124.58	138.84
500	70.99	47.43	54.30	-21.27	-20.13	-22.94	184.03	121.85	134.99
510	69.07	46.31	52.78	-23.90	-22.14	-25.57	178.55	118.63	130.77
520	67.15	45.39	51.44	-26.48	-24.12	-28.14	173.02	115.75	126.89
530	65.23	44.29	49.97	-29.00	-26.07	-30.66	167.45	112.50	122.76
540	63.31	43.19	48.54	-31.47	-28.00	-33.12	161.85	109.26	118.69
550	61.39	42.79	47.47	-33.88	-29.97	-35.56	156.23	107.25	115.26
560	70.70	41.69	46.08	-37.53	-31.90	-37.95	170.07	103.95	111.26
570	68.18	41.37	45.11	-41.08	-33.85	-40.30	163.18	102.05	108.01
580	65.72	40.25	43.77	-44.53	-35.80	-42.62	156.40	98.69	104.08
590	63.32	39.16	42.48	-47.87	-37.72	-44.90	149.74	95.39	100.24
600	60.97	38.77	41.55	-51.13	-39.69	-47.16	143.20	93.32	97.06

TABLE 14

R_{21} (μ-SEC/UNIT FAULT), T = 150 SEC

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
10	- .49	- 4.10	- .28	.05	- .01	.02	5.32	- 2.55	3.38
15	.99	- 3.01	2.46	.17	.05	.09	10.76	1.35	11.12
20	2.45	- 2.55	5.40	.36	.17	.11	16.17	4.43	19.37
25	4.88	- 1.41	8.35	.60	.35	.10	22.75	9.35	27.64
30	6.67	.34	11.28	.87	.56	.04	28.84	15.04	35.88
33	7.74	1.38	13.04	1.06	.71	- .02	32.47	18.44	40.79
35	8.44	2.07	14.20	1.20	.81	- .06	34.86	20.68	44.07
40	16.80	5.58	17.10	1.29	.96	- .20	52.44	29.10	52.20
45	19.68	8.10	19.39	1.18	1.06	- .34	60.69	35.97	59.26
50	22.55	10.60	22.17	1.04	1.12	- .52	68.85	42.81	67.12
55	24.44	13.08	24.93	.96	1.13	- .73	75.37	49.60	74.93
60	27.15	15.52	27.66	.87	1.10	- .97	83.25	56.31	82.64
65	29.83	17.96	30.38	.75	1.03	-1.25	91.05	62.87	90.30
70	32.48	20.37	33.07	.62	.92	-1.56	98.75	69.47	97.88
75	35.09	22.76	35.73	.47	.76	-1.90	106.34	76.01	105.38
80	36.50	25.11	38.36	.42	.56	-2.28	111.80	82.45	112.75
85	38.95	27.44	38.14	.37	.32	-2.43	119.05	88.76	115.31
90	41.36	29.74	40.52	.32	.03	-2.60	126.18	95.07	122.19
95	43.72	32.02	42.85	.25	- .30	-2.79	133.13	101.30	128.94
100	46.03	34.26	45.14	.18	- .66	-2.99	139.98	107.42	135.53
105	48.28	36.47	45.55	.10	-1.07	-3.07	146.64	113.42	138.84
110	50.49	38.66	47.66	.01	-1.52	-3.16	153.16	119.39	144.97
115	52.63	40.81	49.71	- .09	-2.01	-3.27	159.48	125.26	150.95
120	54.72	42.91	51.69	- .19	-2.54	-3.38	165.65	131.01	156.73
125	56.75	43.80	53.63	- .30	-3.01	-3.50	171.63	134.59	162.32
130	59.23	45.79	55.49	- .43	-3.51	-3.62	178.32	140.05	167.76
135	61.14	47.74	57.30	- .57	-4.05	-3.76	183.96	145.39	173.01
140	62.99	49.64	59.04	- .71	-4.63	-3.91	189.42	150.60	178.05
145	64.77	48.92	60.71	- .86	-4.99	-4.06	194.65	151.05	182.90
150	66.48	50.65	62.32	-1.02	-5.37	-4.22	199.69	155.86	187.55
155	68.12	52.33	63.85	-1.18	-5.78	-4.39	204.51	160.54	191.99
160	69.68	53.95	65.31	-1.35	-6.21	-4.57	209.10	165.04	196.21
165	71.16	54.57	70.12	-1.53	-6.58	-5.08	213.46	167.63	206.36
170	72.57	56.07	71.52	-1.71	-6.96	-5.61	217.60	171.79	210.30
175	73.90	57.51	72.85	-1.90	-7.36	-6.16	221.49	175.79	214.04
180	75.15	58.88	74.10	-2.09	-7.78	-6.71	225.15	179.60	217.57
185	76.32	60.39	75.30	-2.28	-8.23	-7.28	228.56	183.58	220.94
190	77.41	61.65	76.43	-2.49	-8.70	-7.87	231.73	187.06	224.07
195	78.41	62.86	77.48	-2.69	-9.18	-8.46	234.65	190.37	226.99

TABLE 14—*Continued*

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
200	79.33	64.01	78.47	- 2.90	- 9.68	- 9.07	237.30	193.49	229.69
210	84.76	66.32	80.23	- 4.00	- 10.74	- 10.32	248.80	199.56	234.46
220	86.12	68.19	81.71	- 5.13	- 11.87	- 11.61	252.62	204.54	238.35
230	87.18	70.42	82.90	- 6.28	- 13.10	- 12.95	255.49	209.88	241.37
240	87.92	71.80	83.80	- 7.45	- 14.38	- 14.33	257.41	213.38	243.50
250	88.34	72.93	84.40	- 8.65	- 15.72	- 15.74	258.36	216.13	244.74
260	93.23	73.80	84.72	- 10.68	- 17.10	- 17.18	267.00	218.11	245.09
270	93.08	74.43	85.25	- 12.72	- 18.53	- 18.69	266.20	219.34	245.46
280	92.66	74.81	85.00	- 14.78	- 19.99	- 20.23	264.58	219.80	244.04
290	91.99	74.93	84.71	- 16.85	- 21.49	- 21.81	262.14	219.50	242.20
300	91.05	74.81	83.90	- 18.92	- 23.02	- 23.41	258.90	218.46	239.07
310	89.87	74.46	83.06	- 21.00	- 24.59	- 25.05	254.88	216.69	235.54
320	88.44	73.86	81.72	- 23.08	- 26.17	- 26.71	250.09	214.19	230.77
330	86.78	73.04	80.37	- 25.16	- 27.78	- 28.41	244.56	210.99	225.64
340	84.88	72.00	78.54	- 27.24	- 29.40	- 30.12	238.32	207.11	219.34
350	82.78	70.74	78.41	- 29.31	- 31.04	- 32.21	231.40	202.63	215.91
360	96.33	69.28	76.08	- 34.12	- 32.70	- 34.30	251.95	197.46	208.14
370	93.21	70.64	75.60	- 38.82	- 34.98	- 36.67	242.69	197.17	203.41
380	90.05	71.79	75.00	- 43.42	- 37.88	- 39.33	233.21	196.26	198.16
390	86.88	69.54	71.95	- 47.92	- 40.73	- 41.97	223.58	189.07	188.25
400	83.68	71.13	79.65	- 52.32	- 43.92	- 46.36	213.82	188.58	196.93
410	80.49	68.42	75.58	- 56.64	- 47.05	- 50.63	203.94	179.95	184.61
420	77.29	69.51	82.96	- 60.86	- 50.30	- 55.71	193.97	178.07	192.04
430	74.11	66.35	77.80	- 65.00	- 53.67	- 61.50	183.95	168.04	177.33
440	70.95	70.15	78.24	- 69.06	- 57.62	- 67.56	173.90	168.98	172.09
450	67.82	73.21	78.13	- 73.04	- 62.74	- 74.36	163.86	169.79	166.42
460	78.74	68.60	72.10	- 79.36	- 68.31	- 81.31	178.12	157.03	150.33
470	74.03	64.44	66.56	- 85.40	- 73.63	- 87.86	164.79	145.16	135.33
480	69.51	60.12	61.05	- 91.21	- 78.72	- 94.05	151.86	133.02	120.43
490	65.19	55.98	55.81	- 96.79	- 83.58	- 99.89	139.38	121.26	106.19
500	61.07	52.25	51.01	-102.15	- 88.26	-105.44	127.34	110.36	92.93
510	57.16	48.40	46.28	-107.33	- 92.73	-110.67	115.76	99.24	79.83
520	53.45	44.91	41.93	-112.32	- 97.02	-115.61	104.65	88.88	67.61
530	49.97	41.39	37.70	-117.15	-101.13	-120.30	94.04	78.50	55.69
540	46.70	38.06	33.75	-121.84	-105.07	-124.74	83.94	68.56	44.44
550	43.67	35.38	30.22	-216.39	-108.96	-128.99	74.38	59.87	34.06
560	47.11	32.27	26.73	-132.05	-112.68	-133.02	75.42	50.49	23.89
570	42.42	29.87	23.69	-137.37	-116.31	-136.88	62.68	42.48	14.68
580	38.03	26.98	20.66	-142.39	-119.84	-140.58	50.63	33.67	5.60
590	33.95	24.32	17.92	-147.12	-123.24	-144.12	39.32	25.41	- 2.78
600	30.17	22.14	15.52	-151.60	-126.59	-147.57	28.73	18.09	- 10.43

TABLE 15

R_{21} (μ-SEC/UNIT FAULT), T = 100 SEC

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
10	- 19.63	- 21.75	- 20.84	.73	.99	.28	- 14.67	- 25.05	- 24.74
15	- 14.68	- 18.44	- 26.70	1.39	1.65	2.61	2.00	- 14.12	- 27.74
20	- 9.81	- 20.00	- 17.74	2.23	2.65	4.94	18.49	- 10.88	- 4.14
25	- 6.26	- 19.59	- 8.92	3.48	4.08	6.88	29.92	- 1.92	19.11
30	- .39	- 14.36	- .19	4.97	5.61	8.43	48.40	13.84	42.11
33	3.06	- 11.29	4.96	5.91	6.52	9.17	59.29	23.13	55.72
35	5.32	- 9.28	8.37	6.55	7.13	9.59	66.42	29.23	64.72
40	18.06	- 6.14	16.77	7.70	9.14	10.37	98.58	40.85	86.91
45	27.27	1.17	24.27	8.24	10.80	10.85	123.21	59.50	107.59
50	36.29	8.29	32.10	8.44	12.10	11.01	147.34	77.81	128.49
55	43.44	15.23	39.79	8.58	13.06	10.83	167.64	95.71	148.99
60	51.75	21.98	47.29	8.45	13.67	10.34	190.31	113.10	168.98
65	59.86	28.58	54.66	8.05	13.99	9.51	212.43	129.59	189.01
70	67.76	34.99	61.86	7.38	13.99	8.38	233.97	146.18	208.14
75	75.45	41.24	68.89	6.46	13.68	6.96	254.91	162.35	226.83
80	80.32	47.29	75.73	5.78	13.07	5.24	269.74	178.00	244.97
85	87.27	53.20	76.71	4.90	12.18	4.09	289.03	192.88	252.82
90	93.96	58.94	82.67	3.83	11.00	2.74	307.60	207.73	269.06
95	100.36	64.51	88.42	2.57	9.54	1.19	325.32	222.13	284.68
100	106.51	69.89	93.91	1.13	7.82	- .55	342.34	236.04	299.59
105	112.36	75.13	95.36	- .49	5.84	- 1.99	358.47	249.22	306.89
110	117.93	80.20	100.16	- 2.28	3.60	- 3.57	373.83	262.31	320.02
115	123.19	85.11	104.71	- 4.22	1.11	- 5.31	388.27	274.96	332.39
120	128.16	89.84	108.97	- 6.32	- 1.61	- 7.18	401.86	287.12	343.93
125	132.82	91.91	112.97	- 8.57	- 4.24	- 9.17	414.55	294.27	354.35
130	138.38	96.19	116.69	-11.00	- 7.07	-11.29	427.99	305.30	364.36
135	142.44	100.31	120.13	-13.56	-10.11	-13.53	438.97	315.86	373.56
140	146.20	104.23	123.27	-16.25	-13.34	-15.87	449.06	325.88	381.89
145	149.63	102.57	126.15	-19.05	-15.90	-18.32	458.17	325.26	389.23
150	152.74	105.95	128.72	-21.98	-18.62	-20.86	466.36	333.97	395.92
155	155.52	109.12	131.02	-25.00	-21.50	-23.50	473.56	342.08	401.78
160	157.98	112.06	133.01	-28.13	-24.51	-26.22	479.80	349.55	406.75
165	160.11	112.82	141.60	-31.34	-27.35	-30.12	485.07	352.66	423.16
170	161.91	115.30	143.12	-34.63	-30.31	-34.10	489.36	358.85	426.70
175	163.38	117.56	144.41	-38.00	-33.40	-38.16	492.68	364.39	429.54
180	164.53	119.59	145.46	-41.44	-36.58	-42.27	495.02	369.27	431.66
185	165.35	121.76	146.28	-44.93	-39.91	-46.47	496.39	374.15	433.12
190	165.86	123.35	146.87	-48.49	-43.33	-50.72	496.80	377.75	433.86
195	166.04	124.72	147.24	-52.08	-46.85	-55.03	496.25	380.71	433.91

TABLE 15—*Continued*

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
200	165.91	125.88	147.39	- 55.72	- 50.43	- 59.37	494.76	383.04	433.28
210	172.35	127.93	147.03	- 65.36	- 57.90	- 68.20	502.77	386.47	430.03
220	169.96	128.79	145.84	- 75.04	- 65.60	- 77.14	493.61	386.79	424.20
230	166.62	129.93	143.86	- 84.74	- 73.69	- 86.18	481.51	386.62	415.88
240	162.39	129.20	141.13	- 94.40	- 81.91	- 95.26	466.61	382.17	405.24
250	157.34	127.76	137.72	-103.99	- 90.25	-104.39	449.12	375.56	392.39
260	159.20	125.67	133.68	-115.86	- 98.64	-113.49	443.05	366.93	377.54
270	152.12	122.96	129.79	-127.44	-107.09	-122.71	420.00	356.37	362.01
280	144.62	119.70	124.63	-138.77	-115.52	-131.86	395.46	344.06	343.46
290	136.81	115.92	119.39	-149.81	-123.96	-141.04	369.71	330.12	324.01
300	128.77	111.72	113.50	-160.58	-132.33	-150.14	342.97	314.76	302.80
310	120.57	107.14	107.66	-171.09	-140.67	-159.25	315.46	298.11	281.10
320	112.31	102.28	101.41	-181.35	-148.94	-168.31	287.46	280.44	258.26
330	104.09	97.18	95.37	-191.40	-157.15	-177.40	259.23	261.87	235.41
340	96.01	91.95	89.17	-201.25	-165.29	-186.48	231.05	242.69	212.07
350	88.18	86.65	84.81	-210.95	-173.43	-196.29	203.25	223.33	192.29
360	92.35	81.40	78.59	-224.93	-181.53	-206.06	195.44	203.61	168.84
370	79.67	78.88	74.31	-237.73	-190.72	-216.35	158.44	188.77	148.73
380	67.85	75.36	69.85	-249.53	-200.80	-227.13	123.39	172.10	128.13
390	56.96	68.68	63.95	-260.39	-210.48	-237.88	90.52	149.92	105.25
400	47.03	64.89	64.24	-270.45	-220.54	-250.99	59.91	132.30	91.73
410	38.10	57.62	55.35	-279.84	-230.19	-263.45	31.70	108.14	63.24
420	30.24	53.37	53.09	-288.69	-239.78	-276.37	6.03	89.39	45.52
430	23.49	45.71	40.83	-297.12	-249.28	-289.07	- 16.93	63.81	11.13
440	17.92	41.79	31.17	-305.28	-258.93	-300.83	- 37.03	42.26	- 18.67
450	13.60	33.98	18.77	-313.31	-268.75	-311.52	- 54.05	17.30	- 51.55
460	4.76	21.22	4.22	-321.39	-277.52	-320.31	- 80.99	- 15.77	- 87.33
470	- 5.89	9.60	- 8.92	-328.08	-284.70	-327.04	-109.76	- 46.06	-119.63
480	- 15.22	- 1.10	- 20.76	-333.58	-290.41	-331.90	-135.36	- 74.16	-148.92
490	- 23.23	- 10.74	- 31.29	-338.08	-294.81	-335.10	-157.73	- 99.69	-175.07
500	- 29.94	- 19.66	- 40.93	-341.76	-298.02	-336.82	-176.95	-123.32	-198.83
510	- 35.35	- 27.54	- 49.28	-344.79	-300.17	-337.22	-192.99	-144.56	-219.74
520	- 39.47	- 34.69	- 56.77	-347.37	-301.38	-336.46	-205.86	-163.84	-238.40
530	- 42.27	- 40.85	- 63.12	-349.66	-301.77	-334.70	-215.52	-180.87	-254.50
540	- 43.74	- 46.09	- 68.47	-351.86	-301.48	-332.10	-221.90	-195.64	-268.16
550	- 43.84	- 51.87	- 73.65	-354.15	-300.39	-328.68	-224.93	-210.90	-281.07
560	- 58.70	- 55.99	- 77.40	-353.66	-298.76	-324.67	-255.75	-222.68	-290.89
570	- 63.95	- 60.71	- 81.10	-352.24	-296.55	-320.14	-268.09	-235.00	-300.07
580	- 68.14	- 63.82	- 83.40	-350.07	-293.80	-315.19	-277.88	-244.05	-306.36
590	- 71.28	- 66.09	- 84.82	-347.31	-290.76	-310.01	-285.20	-251.01	-310.51
600	- 73.42	- 69.43	- 86.39	-344.13	-287.17	-304.55	-290.11	-259.48	-314.54

TABLE 16

R_{21} (μ-SEC/UNIT FAULT), T = 50 SEC

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
10	- 89.90	- 69.84	-113.67	27.30	19.83	11.98	- 70.81	- 72.49	-142.83
15	- 64.06	- 55.19	-141.90	40.30	29.42	47.89	7.32	- 27.79	-161.17
20	- 40.48	- 54.46	- 92.94	53.00	40.91	80.48	79.86	- 5.25	- 43.48
25	- 23.23	- 45.91	- 48.17	67.52	54.14	105.37	128.48	37.36	64.29
30	1.61	- 25.93	- 6.91	82.19	66.61	123.09	200.95	93.78	163.62
33	14.86	- 15.15	16.13	90.39	73.46	130.51	240.21	124.68	219.22
35	22.93	- 8.52	30.86	95.62	77.77	134.19	264.40	143.89	254.77
40	72.51	14.54	65.54	103.10	87.68	139.25	381.86	199.98	338.57
45	107.45	39.09	94.08	102.64	93.47	139.50	466.89	257.71	410.49
50	139.70	61.26	122.06	97.09	95.45	135.05	545.43	310.24	478.86
55	162.68	81.33	147.83	89.25	94.01	126.26	604.89	357.85	541.84
60	188.42	99.41	171.48	77.55	89.49	113.56	669.03	400.75	599.67
65	211.87	115.82	193.45	62.33	82.30	96.95	727.39	438.58	654.42
70	233.18	130.60	213.76	43.89	72.58	77.01	780.27	473.76	703.77
75	252.47	143.92	232.65	22.52	60.56	53.90	827.96	505.47	749.56
80	261.20	155.85	250.19	2.03	46.54	27.96	853.18	533.86	791.96
85	275.57	166.63	247.67	- 20.58	30.68	5.59	888.94	558.72	798.69
90	287.85	176.25	260.64	- 45.12	13.19	- 18.77	919.09	581.60	830.46
95	298.08	184.85	271.99	- 71.19	- 5.84	- 44.99	943.67	601.99	857.87
100	306.41	192.48	281.74	- 98.80	- 26.12	- 72.71	963.06	620.00	881.00
105	312.85	199.28	279.02	-127.45	- 47.63	- 98.48	977.23	635.41	880.44
110	317.51	205.26	285.39	-157.17	- 70.18	-125.37	986.47	649.41	894.41
115	320.43	210.51	290.06	-187.50	- 93.70	-153.23	990.85	661.58	903.70
120	321.71	215.06	293.09	-218.43	-117.96	-181.73	990.59	672.00	908.44
125	321.39	213.47	294.57	-249.71	-141.21	-210.83	985.83	670.93	908.20
130	322.11	216.81	294.55	-281.68	-165.08	-240.26	980.41	678.11	904.45
135	318.63	219.43	293.10	-313.50	-189.52	-269.92	966.78	683.39	896.66
140	313.80	221.34	290.31	-345.29	-214.32	-299.51	949.24	686.86	885.04
145	307.76	212.54	286.22	-376.65	-235.56	-329.10	928.13	669.57	869.47
150	300.52	213.85	280.93	-407.69	-257.24	-358.39	903.47	670.38	850.68
155	292.21	214.17	274.50	-438.12	-279.27	-387.32	875.63	668.52	828.56
160	282.90	213.54	267.05	-467.88	-301.42	-415.64	844.78	664.15	803.44
165	272.67	208.94	269.35	-496.89	-322.43	-448.18	811.15	651.34	794.82
170	261.64	207.06	257.55	-525.05	-343.49	-479.26	775.00	642.96	760.39
175	249.88	204.26	245.37	-552.30	-364.54	-508.93	736.58	632.03	724.63
180	237.50	200.61	232.86	-578.58	-385.35	-537.01	696.16	618.76	687.79
185	224.60	196.56	219.94	-603.83	-406.12	-563.74	654.03	603.85	649.63
190	211.31	191.18	206.72	-628.04	-426.46	-588.89	610.48	585.81	610.39
195	197.73	185.09	193.18	-651.19	-446.35	-612.50	565.82	565.79	570.07

TABLE 16—*Continued*

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
200	184.01	178.37	179.41	-673.22	-465.59	-634.45	520.48	544.01	528.98
210	156.20	163.28	151.05	-718.29	-502.40	-673.71	427.96	495.28	443.98
220	121.23	145.69	122.01	-755.48	-535.90	-706.38	322.36	439.95	356.54
230	88.20	126.38	92.50	-785.53	-566.16	-732.54	220.75	378.73	267.24
240	57.64	104.65	62.99	-809.23	-591.97	-752.12	124.67	311.76	177.45
250	30.27	82.05	33.74	-827.51	-613.22	-765.30	36.03	242.06	87.93
260	- 4.57	59.01	5.30	-839.90	-629.71	-772.25	- 65.02	170.90	.23
270	- 36.91	35.84	- 23.32	-843.62	-641.48	-773.14	-159.15	99.06	- 88.09
280	- 65.24	13.04	- 50.22	-840.03	-648.56	-768.20	-243.38	27.94	-172.01
290	- 89.30	- 9.07	- 75.78	-830.45	-651.17	-757.83	-316.97	- 41.57	-252.36
300	-108.83	- 29.91	- 98.36	-816.26	-649.62	-742.80	-379.20	-107.94	-325.09
310	-123.41	- 49.09	-118.52	-798.96	-644.34	-723.74	-428.94	-170.10	-391.27
320	-132.46	- 65.97	-134.27	-780.18	-635.96	-701.85	-464.73	-226.38	-446.22
330	-135.22	- 80.02	-146.20	-761.77	-625.19	-678.12	-484.71	-275.43	-490.92
340	-130.77	- 90.50	-152.01	-745.85	-613.03	-654.31	-486.58	-315.34	-520.14
350	-117.94	- 96.70	-159.85	-734.91	-600.68	-628.56	-467.57	-343.96	-548.11
360	-155.98	- 97.70	-156.87	-707.93	-589.56	-604.71	-540.25	-359.66	-551.87
370	-165.14	-104.36	-155.01	-675.81	-576.56	-581.61	-557.43	-381.46	-553.64
380	-169.94	-112.74	-149.87	-640.27	-560.12	-559.99	-564.50	-402.81	-545.50
390	-170.95	-110.81	-131.12	-602.97	-544.10	-544.61	-562.84	-401.96	-506.88
400	-168.56	-118.42	-145.16	-565.28	-525.99	-520.15	-553.34	-419.38	-527.25
410	-162.92	-113.79	-130.40	-528.47	-509.18	-499.62	-536.41	-411.67	-490.53
420	-154.03	-113.42	-136.50	-493.82	-493.85	-478.32	-512.00	-409.84	-489.51
430	-141.68	-104.03	-126.01	-462.61	-480.19	-453.14	-479.62	-390.29	-456.79
440	-125.48	-105.39	-123.40	-436.25	-466.52	-428.13	-438.30	-389.47	-436.58
450	-104.84	-113.57	-124.57	-416.34	-446.31	-398.74	-386.61	-395.06	-421.47
460	-125.06	-113.45	-118.43	-384.28	-420.68	-366.47	-410.33	-384.86	-393.65
470	-119.55	-111.78	-111.63	-352.64	-393.87	-334.92	-388.01	-371.36	-365.33
480	-113.10	-108.17	-103.93	-321.91	-366.62	-304.56	-364.34	-354.30	-336.31
490	-105.99	-103.35	- 95.91	-292.65	-339.76	-275.90	-339.96	-335.08	-307.69
500	- 98.37	- 98.64	- 88.44	-265.22	-313.34	-248.89	-315.16	-316.34	-281.08
510	- 90.30	- 92.79	- 80.76	-239.91	-288.04	-223.87	-290.04	-295.91	-255.16
520	- 81.78	- 87.03	- 73.62	-217.04	-264.03	-200.82	-264.49	-276.03	-231.24
530	- 72.69	- 80.74	- 66.66	-196.92	-241.44	-179.68	-238.23	-255.67	-208.63
540	- 62.86	- 74.22	- 60.07	-179.91	-220.60	-160.52	-210.75	-235.30	-187.60
550	- 52.03	- 69.63	- 54.53	-166.46	-200.63	-142.93	-181.41	-218.93	-169.38
560	- 56.83	- 63.76	- 48.97	-148.98	-182.29	-127.08	-181.22	-200.76	-151.94
570	- 51.74	- 59.40	- 44.29	-132.88	-165.26	-112.74	-164.10	-185.77	-136.86
580	- 46.87	- 54.30	- 39.71	-118.10	-149.34	- 99.77	-148.07	-170.00	-122.66
590	- 42.25	- 49.25	- 35.47	-104.69	-134.92	- 88.18	-133.19	-154.76	-109.71
600	- 37.88	- 45.75	- 32.01	- 92.61	-121.29	- 77.67	-119.39	-142.80	- 98.74

TABLE 17

R_{12} (μ-SEC/UNIT FAULT), T = 100 SEC

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
10	13.32	.30	4.50	1.03	.06	.16	31.71	4.23	10.29
15	15.40	1.15	9.61	1.82	.19	- .00	39.99	7.49	21.39
20	17.40	2.62	11.48	2.79	.38	- .25	48.06	11.98	26.89
25	24.19	4.61	13.37	3.71	.60	- .51	64.56	17.72	32.42
30	26.54	5.94	15.22	4.63	.86	- .78	73.23	22.30	37.87
33	27.90	6.72	16.33	5.26	1.05	- .95	78.28	25.01	41.11
35	28.78	7.23	17.06	5.70	1.18	-1.06	81.57	26.78	43.26
40	51.04	12.49	18.88	5.71	1.07	-1.35	123.32	37.70	48.59
45	54.70	14.35	20.07	4.95	.93	-1.59	134.46	43.05	52.73
50	58.31	16.18	21.79	4.20	.78	-1.84	145.37	48.30	57.80
55	59.53	17.98	23.48	3.74	.59	-2.09	152.67	53.47	62.76
60	62.84	19.74	25.13	3.31	.39	-2.35	162.88	58.51	67.60
65	66.05	21.47	26.75	2.89	.16	-2.61	172.78	63.48	72.21
70	69.16	23.16	28.32	2.49	- .10	-2.88	182.34	68.32	76.81
75	72.15	24.81	29.85	2.10	- .37	-3.16	191.54	73.03	81.26
80	72.68	26.40	31.33	2.06	- .67	-3.43	197.30	77.58	85.54
85	75.31	27.96	30.50	2.04	- .99	-3.43	205.51	82.04	85.93
90	77.78	29.47	31.77	2.06	-1.33	-3.43	213.25	86.32	89.69
95	80.08	30.92	32.97	2.10	-1.70	-3.42	220.46	90.45	93.24
100	82.23	32.32	34.08	2.16	-2.08	-3.40	227.20	94.39	96.55
105	84.20	33.66	33.78	2.25	-2.48	-3.25	233.37	98.23	97.40
110	85.99	34.95	34.70	2.37	-2.91	-3.09	239.00	101.84	100.14
115	87.59	36.17	35.53	2.50	-3.36	-2.92	244.05	105.27	102.62
120	89.00	37.33	36.27	2.65	-3.82	-2.75	248.52	108.50	104.82
125	90.22	37.41	36.93	2.82	-4.19	-2.58	252.39	109.85	106.85
130	92.04	38.41	37.49	2.94	-4.57	-2.41	257.77	112.63	108.50
135	92.87	39.34	37.95	3.08	-4.97	-2.23	260.43	115.20	109.86
140	93.49	40.20	38.32	3.23	-5.38	-2.05	262.48	117.54	110.92
145	93.91	38.92	38.59	3.39	-5.53	-1.88	263.88	116.15	111.77
150	94.12	39.59	38.77	3.55	-5.69	-1.70	264.65	117.96	112.25
155	94.12	40.17	38.85	3.72	-5.86	-1.52	264.78	119.51	112.43
160	93.92	40.65	38.83	3.90	-6.03	-1.35	264.27	120.78	112.32
165	93.50	40.34	40.70	4.07	-6.12	-1.45	263.12	120.53	115.53
170	92.88	40.64	40.49	4.24	-6.21	-1.56	261.33	121.26	114.86
175	92.05	40.85	40.20	4.41	-6.31	-1.66	258.91	121.70	113.93
180	91.01	40.97	39.83	4.58	-6.42	-1.77	255.86	121.86	112.74
185	89.78	41.11	39.37	4.73	-6.53	-1.89	252.19	121.95	111.33
190	88.34	41.04	38.33	4.88	-6.65	-2.01	247.92	121.55	109.63
195	86.71	40.87	38.21	5.02	-6.78	-2.13	243.04	120.87	107.69

TABLE 17—*Continued*

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
200	84.90	40.62	37.52	5.14	- 6.92	- 2.26	237.60	119.92	105.51
210	84.60	39.96	35.89	4.37	- 7.21	- 2.54	232.14	117.40	100.45
220	79.68	38.83	33.99	3.56	- 7.53	- 2.83	217.41	113.62	94.51
230	74.19	37.69	31.82	2.72	- 7.90	- 3.15	200.90	109.38	87.74
240	68.19	35.90	29.42	1.83	- 8.29	- 3.51	182.78	103.60	80.25
250	61.75	33.82	26.80	.89	- 8.70	- 3.89	163.25	96.91	72.07
260	57.92	31.47	24.00	- .89	- 9.13	- 4.31	147.93	89.42	63.35
270	50.52	28.89	21.18	- 2.64	- 9.58	- 4.78	125.71	81.18	54.33
280	42.93	26.10	18.11	- 4.40	-10.06	- 5.30	102.79	72.30	44.70
290	35.22	23.12	15.00	- 6.15	-10.56	- 5.86	79.46	62.86	34.85
300	27.48	20.01	11.80	- 7.90	-11.08	- 6.47	55.91	52.97	24.77
310	19.78	16.78	8.62	- 9.67	-11.63	- 7.13	32.38	42.72	14.66
320	12.19	13.49	5.45	-11.46	-12.20	- 7.85	9.08	32.24	4.57
330	4.79	10.16	2.85	-13.27	-12.81	- 8.62	- 13.76	21.61	- 5.35
340	- 2.34	6.85	- .64	-15.12	-13.44	- 9.45	- 35.91	10.98	- 14.97
350	- 9.13	3.57	- 3.59	-17.00	-14.12	-10.33	- 57.13	.50	- 24.33
360	- 19.04	.38	- 6.34	-18.32	-14.83	-11.26	- 84.24	- 9.82	- 33.22
370	- 26.68	- 2.89	- 9.15	-19.38	-15.57	-12.20	-106.61	- 20.17	- 42.07
380	- 33.87	- 6.38	-11.93	-20.21	-16.25	-13.13	-127.75	- 30.81	- 50.69
390	- 40.54	- 9.54	-14.13	-20.82	-16.88	-14.10	-147.46	- 40.68	- 58.02
400	- 46.65	-13.36	-18.94	-21.23	-17.42	-14.56	-165.63	- 51.77	- 70.11
410	- 52.18	-16.37	-21.14	-21.48	-17.93	-14.98	-182.14	- 61.23	- 77.07
420	- 57.08	-20.31	-26.92	-21.58	-18.37	-14.98	-196.88	- 72.23	- 90.37
430	- 61.31	-23.03	-29.10	-21.56	-18.72	-14.49	-209.76	- 80.91	- 96.90
440	- 64.86	-28.44	-33.44	-21.45	-18.66	-13.61	-220.68	- 94.57	-107.09
450	- 67.68	-34.52	-38.14	-21.27	-17.68	-11.95	-229.56	-108.67	-117.57
460	- 86.75	-37.40	-40.12	-17.50	-16.09	- 9.80	-267.24	-116.85	-123.04
470	- 89.56	-40.24	-42.06	-13.55	-14.32	- 7.50	-275.24	-124.71	-128.23
480	- 91.89	-42.69	-43.68	- 9.44	-12.37	- 5.05	-281.83	-131.64	-132.64
490	- 93.72	-44.90	-45.11	- 5.21	-10.28	- 2.49	-286.99	-137.87	-136.51
500	- 95.07	-47.14	-46.55	- .88	- 8.00	.20	-290.69	-143.88	-140.16
510	- 95.92	-48.89	-47.62	3.52	- 5.60	2.99	-292.93	-148.76	-142.95
520	- 96.27	-50.61	-48.66	7.97	- 3.08	5.88	-293.72	-153.30	-145.45
530	- 96.13	-51.89	-49.37	12.45	- .44	8.85	-293.04	-156.74	-147.15
540	- 95.49	-52.91	-49.91	16.92	2.29	11.88	-290.91	-159.46	-148.31
550	- 94.37	-54.59	-50.61	21.35	5.27	15.02	-287.35	-163.06	-149.55
560	-110.53	-55.16	-50.80	29.77	8.32	18.21	-313.85	-164.38	-149.65
570	-108.29	-56.56	-51.25	38.01	11.53	21.46	-307.39	-166.91	-149.99
580	-105.89	-56.68	-51.10	46.10	14.88	24.76	-300.38	-166.88	-149.06
590	-103.36	-56.59	-50.80	54.01	18.26	28.08	-292.87	-166.21	-147.65
600	-100.69	-57.33	-50.77	61.75	21.88	31.48	-284.87	-166.77	-146.49

TABLE 18

R_{12} (μ-SEC/UNIT FAULT), T = 50 SEC

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
10	- 38.17	- 41.62	- 42.36	7.14	6.71	2.19	7.25	- 31.28	- 40.94
15	- 18.12	- 30.30	- 45.05	12.54	10.92	12.62	73.65	5.78	- 24.62
20	.63	- 25.72	- 18.70	19.12	16.50	21.90	136.45	32.81	43.61
25	22.55	- 15.09	6.35	27.02	23.14	28.52	195.58	75.30	108.67
30	42.41	.62	30.13	35.49	29.77	32.60	258.26	122.82	170.58
33	53.18	9.28	43.75	40.73	33.66	33.89	292.70	149.33	206.09
35	59.81	14.69	52.56	44.28	36.20	34.28	314.12	166.03	229.11
40	125.40	42.21	73.65	45.85	39.39	33.70	454.92	228.90	284.22
45	151.77	61.37	90.56	40.48	40.40	31.65	524.80	277.51	331.22
50	176.37	79.00	108.33	32.84	39.37	27.79	589.86	322.55	378.05
55	191.54	95.20	124.80	25.53	36.47	22.24	636.39	363.97	421.37
60	211.27	109.93	139.90	16.55	31.89	15.16	689.36	401.62	460.96
65	228.95	123.36	153.76	6.04	25.82	6.53	736.53	435.10	497.69
70	244.53	135.41	166.29	- 5.85	18.35	- 3.40	777.79	465.84	530.10
75	258.01	146.15	177.55	- 18.96	9.59	- 14.54	813.03	493.12	558.92
80	260.89	155.56	187.50	- 30.01	- .27	- 26.73	826.03	516.85	584.03
85	269.32	163.75	182.67	- 41.84	- 11.11	- 35.74	847.43	536.74	582.22
90	275.32	170.67	189.07	- 54.34	- 22.81	- 45.42	861.77	553.82	597.75
95	278.86	176.38	193.81	- 67.29	- 35.27	- 55.68	869.03	567.59	608.52
100	280.01	180.88	196.90	- 80.65	- 48.31	- 66.36	869.31	578.04	614.52
105	278.79	184.24	190.88	- 94.16	- 61.87	- 75.36	862.69	584.85	602.52
110	275.23	186.44	190.68	-107.78	- 75.80	- 84.58	849.24	588.98	598.93
115	269.44	187.52	188.74	-121.28	- 90.04	- 93.94	829.25	590.00	590.30
120	261.46	187.51	185.12	-134.59	-104.40	-103.28	802.83	587.97	576.84
125	251.39	181.71	179.86	-147.57	-117.45	-112.52	770.28	574.44	558.12
130	241.28	179.74	173.06	-160.37	-130.48	-121.55	734.59	566.63	535.44
135	227.17	176.63	164.78	-172.53	-143.44	-130.32	690.27	555.62	508.45
140	211.29	172.43	155.15	-184.07	-156.15	-138.67	640.68	541.58	477.55
145	193.90	159.48	144.20	-194.79	-165.77	-146.59	586.61	509.62	442.56
150	175.01	153.93	132.10	-204.68	-175.18	-153.96	528.09	490.65	404.41
155	154.89	147.15	118.93	-213.62	-184.31	-160.73	465.90	468.20	363.10
160	133.67	139.25	104.87	-221.56	-193.01	-166.82	400.42	442.59	319.21
165	111.54	128.28	93.64	-228.43	-200.47	-173.79	332.18	409.87	279.38
170	88.66	118.67	76.52	-234.20	-207.43	-179.59	261.70	378.92	228.42
175	65.23	108.04	58.93	-238.83	-213.83	-184.19	189.54	345.10	176.08
180	41.44	96.53	41.08	-242.31	-219.56	-187.57	116.25	308.85	122.91
185	17.49	84.32	22.90	-244.61	-224.64	-189.73	42.41	270.30	68.75
190	- 6.43	71.11	4.61	-245.74	-228.90	-190.63	- 31.41	229.25	14.28
195	- 30.12	57.25	- 13.73	-245.71	-232.30	-190.27	-104.63	186.38	- 40.35

TABLE 18—*Continued*

Depth km	$10^9 \times P_R$ km^{-2}			$10^9 \times Q_R$ km^{-2}			$10^9 \times S_R$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean	Continent	Shield	Ocean
200	- 53.34	42.91	- 31.93	-244.56	-234.78	-188.66	- 176.52	142.17	- 94.55
210	-105.42	12.74	- 67.86	-236.49	-236.87	-181.71	- 329.04	49.57	-201.50
220	-151.55	- 18.50	-102.22	-222.43	-234.82	-169.93	- 467.27	- 45.71	-303.68
230	-193.16	- 50.95	-134.38	-202.91	-228.36	-153.51	- 592.34	-143.86	-399.16
240	-229.23	- 82.66	-163.51	-178.62	-217.47	-132.86	- 701.16	-239.69	-485.43
250	-258.80	-113.19	-189.10	-150.40	-202.18	-108.31	- 790.88	-331.71	-560.89
260	-299.26	-141.74	-210.50	-110.10	-182.74	- 80.45	- 893.12	-417.51	-623.61
270	-319.63	-167.78	-228.92	- 66.25	-159.36	- 49.28	- 951.77	-495.58	-675.50
280	-333.67	-190.67	-241.27	- 19.52	-132.49	- 15.88	- 991.24	-563.92	-710.36
290	-341.22	-210.03	-249.49	29.08	-102.48	19.53	-1010.91	-621.39	-731.50
300	-342.31	-225.39	-252.09	78.78	- 69.92	56.00	-1010.79	-666.61	-736.09
310	-337.12	-236.54	-250.66	128.74	- 35.25	93.36	- 991.36	-698.91	-727.06
320	-326.01	-243.28	-244.08	178.21	.84	130.71	- 953.54	-717.62	-702.69
330	-309.50	-245.59	-234.15	226.51	37.92	168.01	- 898.74	-722.62	-666.50
340	-288.25	-243.52	-220.23	273.06	75.28	204.55	- 828.84	-714.07	-618.05
350	-263.15	-237.27	-208.10	317.38	112.54	243.56	- 746.24	-692.56	-568.90
360	-270.64	-227.19	-189.35	386.30	149.07	281.06	- 715.79	-658.82	-504.54
370	-228.23	-222.63	-173.71	445.62	191.01	319.68	- 596.75	-630.87	-442.86
380	-188.63	-214.19	-156.77	496.56	237.15	359.12	- 483.14	-593.20	-376.77
390	-152.06	-195.42	-137.46	539.91	280.12	397.02	- 375.84	-535.25	-306.81
400	-118.76	-184.14	-127.65	576.71	324.22	443.77	- 275.59	-486.45	-250.20
410	- 89.10	-162.58	-102.29	608.00	364.86	485.49	- 183.56	-418.13	-170.36
420	- 63.61	-149.14	- 88.54	634.93	404.28	527.29	- 101.19	-362.66	-111.50
430	- 42.94	-126.53	- 57.53	658.74	442.24	565.28	- 30.23	-288.72	- 25.90
440	- 27.87	-114.35	- 32.96	680.86	480.93	597.31	27.29	-231.01	44.14
450	- 19.32	- 90.73	- 2.62	702.93	519.99	621.96	68.98	-159.54	118.24
460	16.28	- 55.12	27.78	722.04	551.69	635.95	163.78	- 70.54	187.89
470	49.27	- 25.17	52.01	730.74	573.66	640.44	248.82	4.92	242.69
480	76.00	.34	70.99	731.12	587.46	637.31	318.74	69.72	285.23
490	96.95	21.53	85.48	725.00	594.44	628.22	374.62	124.13	317.16
500	112.51	39.95	97.24	714.08	595.71	614.28	417.38	171.58	342.33
510	122.88	54.89	105.58	699.94	592.24	596.69	447.49	210.82	359.79
520	128.09	67.40	111.89	684.17	584.96	576.31	465.00	243.89	372.28
530	128.02	77.20	115.93	668.31	574.59	553.83	469.60	270.55	379.68
540	122.38	84.39	118.12	654.03	562.02	530.01	460.58	290.84	382.77
550	110.70	92.86	120.44	643.07	546.78	504.87	436.86	312.39	385.76
560	141.00	97.64	120.54	620.05	529.99	479.19	490.66	325.94	384.11
570	146.29	103.34	120.89	593.83	511.70	453.16	497.43	340.00	382.53
580	148.56	106.32	119.59	565.47	491.91	426.94	497.35	348.29	377.73
590	148.22	107.36	117.26	536.05	471.65	401.12	491.42	351.86	370.60
600	145.57	110.65	115.71	506.42	450.00	375.41	480.34	358.83	364.82

TABLE 19

L_0 (μ-SEC/UNIT FAULT), T = 300 SEC

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
10	203.78	161.07	234.54	9.45	7.47	4.84
15	203.54	160.88	402.92	14.16	11.21	7.43
20	203.20	211.99	402.75	18.87	15.22	9.54
25	253.64	263.84	403.41	23.38	19.27	11.64
30	253.12	263.42	402.98	27.74	23.27	13.74
33	252.77	263.12	402.80	30.35	25.67	15.00
35	252.52	262.91	402.68	32.08	27.26	15.83
40	414.81	385.46	402.33	35.15	28.77	17.92
45	414.08	384.86	389.79	37.35	30.28	20.17
50	413.30	384.24	389.36	39.54	31.78	22.42
55	397.04	383.58	388.89	42.10	33.28	24.66
60	396.16	382.90	388.36	44.67	34.77	26.90
65	395.23	382.18	387.80	47.22	36.27	29.14
70	394.25	381.43	387.18	49.77	37.76	31.37
75	393.22	380.65	386.52	52.31	39.25	33.60
80	379.90	379.85	385.82	55.19	40.73	35.82
85	378.75	379.01	358.47	58.06	42.21	38.59
90	377.54	378.14	357.66	60.92	43.69	41.34
95	376.28	377.24	356.79	63.76	45.17	44.09
100	374.96	376.32	355.87	66.61	46.64	46.82
105	373.58	375.36	341.14	69.43	48.11	49.72
110	372.14	374.38	340.11	72.26	49.57	52.60
115	370.65	373.36	339.01	75.06	51.03	55.48
120	369.10	372.32	337.86	77.86	52.48	58.34
125	367.50	361.31	336.65	80.64	54.09	61.20
130	369.06	360.21	335.38	83.44	55.68	64.05
135	367.34	359.07	334.05	86.22	57.27	66.88
140	365.56	357.90	332.67	89.00	58.85	69.70
145	363.73	338.65	331.23	91.75	60.80	72.52
150	361.84	337.40	329.73	94.50	62.73	75.31
155	359.90	336.11	328.17	97.22	64.66	78.10
160	357.90	334.79	326.57	99.94	66.58	80.87
165	355.85	327.60	341.66	102.63	68.61	83.29
170	353.74	326.20	339.95	105.32	70.64	85.70
175	351.58	324.75	338.19	107.98	72.65	88.10
180	349.37	323.27	336.39	110.63	74.65	90.47
185	347.10	322.69	334.52	113.26	76.65	92.85
190	344.78	321.12	332.62	115.88	78.64	95.21
195	342.40	319.51	330.66	118.48	80.63	97.55

TABLE 19—*Continued*

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
200	339.98	317.87	328.67	121.05	82.59	99.87
210	351.04	315.39	324.52	125.62	86.52	104.49
220	345.86	311.82	320.20	130.12	90.40	109.05
230	340.50	310.83	315.69	134.56	94.27	113.54
240	334.96	306.95	311.00	138.92	98.08	117.97
250	329.24	302.91	306.13	143.20	101.86	122.33
260	341.13	298.73	301.09	146.86	105.58	126.62
270	335.11	294.39	297.67	150.45	109.25	130.86
280	328.93	289.91	292.29	153.98	112.86	135.03
290	322.62	285.28	287.60	157.44	116.42	139.14
300	316.17	280.51	281.88	160.83	119.92	143.16
310	309.59	275.60	276.84	164.15	123.36	147.11
320	302.87	270.56	270.80	167.40	126.73	150.98
330	296.02	265.37	265.40	170.58	130.05	154.78
340	289.04	260.06	259.06	173.68	133.30	158.48
350	281.95	254.61	259.20	176.71	136.49	161.88
360	331.42	249.04	252.58	177.94	139.60	165.18
370	324.19	254.79	252.97	179.13	142.19	168.31
380	316.90	260.88	253.92	180.30	144.25	171.28
390	309.57	255.02	246.93	181.44	146.26	174.16
400	302.19	264.59	280.28	182.55	148.36	176.03
410	294.77	258.56	273.11	183.64	150.40	177.84
420	287.30	267.81	309.96	184.69	152.46	179.05
430	279.80	261.61	302.68	185.73	154.52	179.69
440	272.25	284.75	318.42	186.73	155.98	179.88
450	264.67	308.89	335.34	187.71	156.28	179.19
460	318.78	302.59	328.10	187.02	156.00	178.05
470	311.22	297.64	321.99	186.34	155.71	176.95
480	303.67	291.36	314.84	185.68	155.43	175.86
490	296.16	285.10	307.74	185.04	155.15	174.80
500	288.67	280.36	301.84	184.41	154.85	173.76
510	281.21	274.12	294.82	183.80	154.57	172.74
520	273.77	269.02	288.72	183.20	154.28	171.75
530	266.36	262.80	281.78	182.62	153.99	170.78
540	258.97	256.59	274.89	182.06	153.71	169.83
550	251.61	254.67	269.96	181.51	153.34	168.90
560	292.97	248.48	263.14	179.62	152.98	167.99
570	285.74	247.04	258.56	177.77	152.57	167.10
580	278.56	240.89	251.81	175.97	152.11	166.23
590	271.47	234.77	245.09	174.21	151.67	165.38
600	264.44	233.05	240.47	172.50	151.14	164.55

TABLE 20

L_0 (μ-SEC/UNIT FAULT), T = 250 SEC

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
10	275.67	209.97	306.51	13.84	10.74	6.93
15	275.24	209.64	526.50	20.75	16.11	10.08
20	274.63	276.10	526.21	27.65	21.84	12.43
25	342.57	343.47	527.02	34.15	27.51	14.74
30	341.64	342.71	526.39	40.37	33.09	17.07
33	341.00	342.19	526.12	44.10	36.43	18.46
35	340.54	341.82	525.93	46.57	38.64	19.39
40	559.02	500.91	525.41	50.54	40.21	21.70
45	557.71	499.88	508.96	53.00	41.77	24.28
50	556.35	498.82	508.32	55.46	43.33	26.86
55	534.15	497.72	507.61	58.53	44.88	29.43
60	532.63	496.58	506.84	61.59	46.42	31.99
65	531.04	495.41	506.00	64.65	47.97	34.55
70	529.38	494.19	505.10	67.69	49.51	37.11
75	527.63	492.93	504.13	70.73	51.05	39.67
80	509.39	491.65	503.11	74.32	52.57	42.21
85	507.47	490.31	467.32	77.89	54.11	45.63
90	505.46	488.94	466.13	81.45	55.63	49.03
95	503.37	487.54	464.85	84.98	57.15	52.43
100	501.18	486.10	463.49	88.51	58.66	55.81
105	498.91	484.61	444.13	92.01	60.18	59.46
110	496.54	483.09	442.59	95.52	61.68	63.10
115	494.10	481.53	440.96	98.99	63.19	66.72
120	491.56	479.94	439.24	102.45	64.68	70.32
125	488.93	465.50	437.42	105.89	66.41	73.92
130	490.51	463.83	435.52	109.35	68.14	77.50
135	487.71	462.10	433.52	112.78	69.86	81.07
140	484.82	460.34	431.45	116.20	71.57	84.60
145	481.86	435.32	429.27	119.58	73.85	88.14
150	478.79	433.45	427.01	122.96	76.13	91.65
155	475.65	431.52	424.66	126.31	78.39	95.15
160	472.43	429.54	422.23	129.64	80.64	98.61
165	469.12	420.03	441.39	132.95	83.07	101.52
170	465.73	417.92	438.80	136.23	85.49	104.42
175	462.25	415.76	436.13	139.48	87.90	107.29
180	458.70	413.54	433.41	142.72	90.28	110.14
185	455.06	412.47	430.60	145.92	92.67	112.99
190	451.34	410.13	427.72	149.11	95.05	115.81
195	447.55	407.73	424.77	152.26	97.41	118.61

TABLE 20—*Continued*

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
200	443.68	405.28	421.76	155.38	99.74	121.38
210	456.68	401.37	415.51	160.68	104.41	126.89
220	448.45	396.05	409.00	165.88	109.01	132.30
230	439.96	393.97	402.21	170.99	113.59	137.64
240	431.21	388.19	395.16	175.99	118.10	142.87
250	422.23	382.18	387.84	180.89	122.54	148.02
260	435.79	375.97	380.27	184.78	126.91	153.07
270	426.39	369.52	374.73	188.58	131.22	158.05
280	416.78	362.88	366.66	192.31	135.44	162.92
290	407.00	356.01	359.44	195.94	139.59	167.70
300	397.03	348.95	350.89	199.49	143.65	172.36
310	386.89	341.67	343.15	202.95	147.64	176.94
320	376.58	334.22	334.15	206.32	151.54	181.38
330	366.09	326.56	325.90	209.60	155.35	185.73
340	355.45	318.72	316.46	212.79	159.07	189.95
350	344.66	310.68	314.91	215.87	162.71	193.71
360	403.02	302.49	305.09	216.18	166.24	197.34
370	392.13	308.00	303.72	216.48	169.00	200.71
380	381.20	313.87	302.94	216.77	170.98	203.83
390	370.27	305.30	292.63	217.05	172.91	206.84
400	359.32	315.20	330.12	217.32	174.90	208.30
410	348.36	306.43	319.61	217.59	176.84	209.72
420	337.39	315.71	360.46	217.84	178.77	210.25
430	326.40	306.74	349.89	218.09	180.71	209.95
440	315.41	332.07	365.89	218.33	181.79	209.05
450	304.41	358.43	383.14	218.56	181.20	206.90
460	364.41	349.42	372.80	216.36	179.80	204.18
470	353.57	342.03	363.83	214.23	178.42	201.52
480	342.82	333.16	353.76	212.15	177.07	198.93
490	332.17	324.37	343.83	210.14	175.75	196.42
500	321.63	317.36	335.31	208.20	174.44	193.96
510	311.19	308.68	325.62	206.31	173.17	191.58
520	300.83	301.35	317.02	204.49	171.91	189.26
530	290.57	292.80	307.56	202.73	170.69	187.01
540	280.40	284.33	298.22	201.03	169.50	184.83
550	270.32	280.63	291.08	199.40	168.20	182.69
560	312.65	272.27	281.94	195.94	166.94	180.63
570	302.87	269.14	275.28	192.61	165.64	178.62
580	293.24	260.91	266.34	189.37	164.30	176.66
590	283.77	252.75	257.52	186.23	163.01	174.78
600	274.46	249.38	250.94	183.20	161.62	172.93

TABLE 21

L_0 (μ-SEC/UNIT FAULT), T = 200 SEC

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
10	383.40	279.49	402.02	21.49	16.35	10.33
15	382.53	278.83	690.40	32.21	24.53	14.02
20	381.30	366.91	689.91	42.90	33.16	16.32
25	475.11	456.02	690.84	52.78	41.54	18.57
30	473.24	454.56	689.90	62.11	49.70	20.83
33	471.96	453.55	689.48	67.69	54.59	22.18
35	471.06	452.84	689.19	71.38	57.82	23.08
40	772.35	663.02	688.41	76.52	59.14	25.33
45	769.81	661.10	666.74	78.88	60.45	28.04
50	767.20	659.14	665.79	81.22	61.76	30.74
55	735.86	657.13	664.74	84.66	63.06	33.45
60	733.04	655.09	663.62	88.08	64.35	36.13
65	730.11	653.00	662.40	91.49	65.64	38.83
70	727.06	650.88	661.09	94.89	66.93	41.51
75	723.91	648.70	659.70	98.27	68.21	44.20
80	698.11	646.50	658.23	102.62	69.48	46.86
85	694.69	644.25	611.25	106.93	70.76	51.01
90	691.12	641.95	609.53	111.23	72.03	55.13
95	687.43	639.62	607.67	115.50	73.30	59.25
100	683.58	637.25	605.69	119.75	74.55	63.34
105	679.61	634.84	580.15	123.97	75.81	67.92
110	675.49	632.38	577.87	128.18	77.06	72.47
115	671.24	629.89	575.44	132.35	78.31	77.00
120	666.85	627.36	572.87	136.50	79.54	81.50
125	662.33	608.05	570.15	140.62	81.19	86.00
130	663.47	605.41	567.28	144.76	82.83	90.46
135	658.68	602.73	564.27	148.85	84.47	94.91
140	653.75	600.00	561.12	152.92	86.09	99.32
145	648.70	566.94	557.82	156.95	88.68	103.72
150	643.50	564.05	554.38	160.97	91.25	108.09
155	638.18	561.08	550.80	164.94	93.81	112.44
160	632.73	558.04	547.08	168.88	96.35	116.74
165	627.15	545.19	571.31	172.79	99.20	120.12
170	621.44	541.96	567.36	176.66	102.02	123.47
175	615.61	538.64	563.29	180.50	104.83	126.80
180	609.65	535.24	559.13	184.29	107.62	130.10
185	603.57	533.30	554.84	188.06	110.40	133.38
190	597.37	529.72	550.46	191.78	113.17	136.63
195	591.05	526.04	545.96	195.46	115.91	139.86

TABLE 21—*Continued*

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
200	584.62	522.28	541.38	199.10	118.63	143.05
210	599.05	516.02	531.88	204.76	124.04	149.38
220	585.50	507.89	521.98	210.28	129.36	155.58
230	571.59	503.86	511.67	215.67	134.65	161.67
240	557.33	495.06	500.98	220.94	139.83	167.62
250	542.75	485.91	489.89	226.06	144.94	173.46
260	557.15	476.46	478.45	229.52	149.94	179.15
270	542.07	466.66	469.49	232.88	154.85	184.76
280	526.74	456.58	457.33	236.15	159.64	190.21
290	511.21	446.17	446.15	239.32	164.34	195.54
300	495.48	435.48	433.29	242.40	168.92	200.71
310	479.55	424.48	421.37	245.38	173.39	205.75
320	463.43	413.22	407.86	248.26	177.74	210.63
330	447.13	401.66	395.21	251.05	181.98	215.37
340	430.65	389.86	381.09	253.73	186.09	219.93
350	414.01	377.77	376.43	256.31	190.09	223.80
360	480.51	365.46	361.78	254.54	193.95	227.52
370	463.96	369.69	357.14	252.83	196.63	230.83
380	447.49	374.24	353.10	251.17	198.13	233.76
390	431.14	361.49	337.84	249.58	199.58	236.56
400	414.89	370.62	377.79	248.04	201.07	237.00
410	398.74	357.67	362.38	246.57	202.51	237.42
420	382.68	365.73	404.99	245.15	203.94	236.57
430	366.72	352.58	389.68	243.79	205.36	234.53
440	350.84	378.74	403.95	242.49	205.53	231.67
450	335.06	405.85	419.51	241.25	203.30	227.13
460	397.57	392.90	404.93	236.50	199.94	221.83
470	382.29	381.90	392.01	231.94	196.67	216.71
480	367.27	369.38	387.09	227.55	193.49	211.76
490	352.55	357.07	364.51	223.33	190.41	207.00
500	338.09	346.84	352.59	219.29	187.39	202.38
510	323.90	334.90	339.59	215.42	184.47	197.93
520	309.95	324.53	327.89	211.71	181.63	193.64
530	296.25	312.96	315.44	208.16	178.88	189.51
540	282.76	301.57	303.28	204.77	176.24	185.54
550	269.51	295.36	293.48	201.54	173.48	181.69
560	308.67	284.31	281.80	195.98	170.83	177.99
570	296.06	278.79	272.71	190.66	168.17	174.43
580	283.76	268.08	261.49	185.54	165.51	170.99
590	271.81	257.55	250.50	180.64	162.96	167.71
600	260.16	251.99	241.82	175.96	160.31	164.53

TABLE 22

L_0 (μ-SEC/UNIT FAULT), T = 150 SEC

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
10	569.65	393.74	537.48	37.64	28.09	16.72
15	567.53	392.19	922.66	56.39	42.12	20.87
20	564.57	515.14	921.70	75.06	56.74	22.41
25	701.87	639.05	922.67	91.89	70.58	23.86
30	697.38	635.65	921.17	107.47	83.93	25.33
33	694.34	633.33	920.48	116.77	91.90	26.21
35	692.19	631.68	920.00	122.92	97.18	26.79
40	1132.16	923.21	918.78	129.70	97.42	28.25
45	1126.29	918.91	889.71	130.69	97.64	30.58
50	1120.38	914.61	888.29	131.68	97.86	32.90
55	1072.56	910.30	886.77	134.84	98.08	35.22
60	1066.40	906.00	885.15	137.99	98.29	37.52
65	1060.11	901.66	883.42	141.12	98.51	39.83
70	1053.68	897.32	881.59	144.23	98.72	42.14
75	1047.10	892.97	879.65	147.33	98.93	44.44
80	1007.77	888.63	877.63	152.31	99.14	46.72
85	1000.79	884.26	814.92	157.26	99.35	51.71
90	993.58	879.89	812.50	162.17	99.56	56.68
95	986.18	875.50	809.85	167.04	99.77	61.64
100	978.52	871.12	807.00	171.88	99.98	66.57
105	970.68	866.71	772.71	176.67	100.19	72.40
110	962.59	862.30	769.35	181.44	100.39	78.20
115	954.32	857.88	765.73	186.16	100.59	83.98
120	945.82	853.46	761.86	190.84	100.80	89.71
125	937.11	826.24	757.72	195.47	101.78	95.44
130	936.39	821.74	753.33	200.12	102.75	101.12
135	927.28	817.20	748.69	204.70	103.72	106.77
140	917.93	812.63	743.81	209.25	104.68	112.37
145	908.41	766.99	738.66	213.74	107.44	117.96
150	898.65	762.21	733.27	218.20	110.18	123.49
155	888.71	757.30	727.63	222.60	112.90	128.99
160	878.58	752.29	721.77	226.95	115.60	134.43
165	868.25	734.04	752.72	231.25	118.86	138.20
170	857.72	728.74	746.46	235.50	122.09	141.93
175	847.01	723.30	740.04	239.70	125.31	145.63
180	836.11	717.73	733.48	243.85	128.48	149.28
185	825.02	714.11	726.72	247.94	131.66	152.92
190	813.75	708.25	719.81	251.97	134.81	156.52
195	802.29	702.25	712.73	255.95	137.93	160.09

TABLE 22—*Continued*

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
200	790.69	696.13	705.53	259.87	141.01	163.61
210	804.38	685.49	690.60	264.68	147.14	170.56
220	780.30	672.30	675.08	269.35	153.13	177.35
230	755.80	664.45	658.93	273.87	159.08	183.99
240	730.91	650.22	642.23	278.25	164.89	190.46
250	705.65	635.45	624.92	282.47	170.58	196.77
260	718.17	620.22	607.10	283.76	176.13	202.89
270	692.55	604.48	592.34	285.00	181.55	208.88
280	666.77	588.29	573.45	286.20	186.82	214.68
290	640.90	571.62	555.72	287.34	191.95	220.31
300	614.94	554.54	535.83	288.45	196.93	225.73
310	588.88	536.99	517.01	289.51	201.76	230.99
320	562.72	519.05	496.18	290.52	206.42	236.02
330	536.48	500.68	476.34	291.48	210.94	240.87
340	510.15	481.95	454.65	292.40	215.28	245.50
350	483.76	462.82	444.19	293.28	219.46	249.04
360	554.78	443.36	421.83	287.15	223.47	252.39
370	529.18	443.96	411.12	281.31	225.55	255.13
380	504.03	444.79	400.95	275.74	225.77	257.28
390	479.41	424.94	377.91	270.43	225.98	259.31
400	455.25	430.90	416.72	265.39	226.19	257.68
410	431.53	411.00	393.79	260.61	226.39	256.13
420	408.23	415.19	433.57	256.08	226.58	252.77
430	385.33	395.24	411.22	251.80	226.78	247.74
440	362.81	419.16	420.17	247.77	225.14	241.68
450	340.66	443.82	430.41	243.98	219.96	233.37
460	398.45	424.76	409.98	235.31	213.20	224.17
470	377.62	408.16	391.70	227.10	206.70	215.40
480	357.48	390.26	372.84	219.30	200.46	207.03
490	338.03	372.91	354.73	211.94	194.49	199.07
500	319.24	358.04	338.64	204.97	188.71	191.46
510	301.05	341.69	321.87	198.40	183.20	184.23
520	283.44	327.21	306.68	192.21	177.92	177.35
530	266.37	311.78	291.14	186.39	172.86	170.81
540	249.81	296.81	276.18	180.92	168.04	164.60
550	233.74	287.18	263.69	175.81	163.17	158.67
560	263.45	273.03	249.78	167.99	158.55	153.05
570	248.65	264.41	238.43	160.62	154.01	147.70
580	234.47	251.06	225.47	153.66	149.56	142.62
590	220.91	238.11	212.96	147.10	145.34	137.83
600	207.93	229.96	202.65	140.93	141.08	133.26

TABLE 23

L_0 (μ-SEC/UNIT FAULT), T = 100 SEC

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
10	1014.01	651.58	749.72	87.93	63.89	31.95
15	1006.33	646.18	1285.56	131.57	95.66	36.23
20	995.60	844.42	1283.12	174.80	128.25	34.82
25	1230.12	1042.07	1283.57	212.45	158.15	33.23
30	1214.07	1030.41	1280.77	246.28	186.52	31.67
33	1203.30	1022.50	1279.49	266.35	203.37	30.73
35	1195.70	1016.88	1278.65	279.56	214.48	30.11
40	1942.78	1478.71	1276.64	288.91	210.20	28.56
45	1922.79	1464.62	1236.09	282.45	205.89	28.90
50	1903.28	1450.84	1234.10	276.07	201.62	29.24
55	1812.94	1437.34	1232.07	275.42	197.39	29.58
60	1793.69	1424.17	1230.03	274.80	193.22	29.92
65	1774.48	1411.22	1227.96	274.18	189.07	30.25
70	1755.31	1398.58	1225.87	273.56	184.96	30.59
75	1736.19	1386.20	1223.75	272.96	180.88	30.93
80	1662.90	1374.14	1221.62	277.18	176.85	31.26
85	1643.35	1362.29	1135.03	281.35	172.84	37.38
90	1623.50	1350.74	1132.25	285.48	168.88	43.49
95	1603.44	1339.44	1129.05	289.54	164.94	49.59
100	1582.99	1328.45	1125.44	293.57	161.05	55.64
105	1562.35	1317.67	1077.85	297.53	157.17	63.70
110	1541.35	1307.18	1073.19	301.46	153.33	71.71
115	1520.15	1296.93	1067.98	305.31	149.52	79.70
120	1498.65	1286.98	1062.25	309.12	145.75	87.61
125	1476.89	1242.85	1055.94	312.88	143.82	95.52
130	1467.77	1233.19	1049.10	316.62	141.91	103.36
135	1445.53	1223.65	1041.72	320.29	140.01	111.16
140	1422.94	1214.27	1033.84	323.92	138.14	118.87
145	1400.19	1143.62	1025.38	327.47	140.40	126.55
150	1377.10	1134.05	1016.42	330.98	142.64	134.16
155	1353.81	1124.32	1006.93	334.43	144.86	141.70
160	1330.29	1114.48	996.96	337.82	147.05	149.15
165	1306.53	1085.02	1037.72	341.15	150.54	153.05
170	1282.54	1074.72	1027.07	344.41	154.00	156.90
175	1258.32	1064.18	1016.13	347.62	157.42	160.72
180	1233.88	1053.46	1004.99	350.77	160.80	164.47
185	1209.23	1045.55	993.53	353.85	164.16	168.21
190	1184.35	1034.33	981.84	356.87	167.49	171.89
195	1159.27	1022.89	969.88	359.83	170.87	175.54

TABLE 23—*Continued*

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
200	1134.04	1011.26	957.72	362.72	174.03	179.12
210	1136.88	990.23	932.58	361.92	180.44	186.18
220	1086.27	965.43	906.53	361.14	186.69	193.03
230	1035.77	948.21	879.50	360.41	192.84	199.70
240	985.38	921.75	851.62	359.71	198.82	206.15
250	935.12	894.44	822.81	359.04	204.63	212.40
260	935.74	866.41	793.21	352.62	210.26	218.42
270	886.86	837.58	767.50	346.53	215.71	224.27
280	838.71	808.08	736.31	340.76	220.97	229.87
290	791.40	777.82	706.49	335.31	226.05	235.27
300	744.83	746.95	673.81	330.18	230.92	240.41
310	698.95	715.37	642.38	325.36	235.60	245.33
320	653.73	683.24	608.36	320.84	240.07	249.99
330	609.12	650.45	575.44	316.62	244.34	254.42
340	565.08	617.16	540.20	312.69	248.39	258.58
350	521.61	583.27	518.29	309.06	252.23	260.86
360	584.20	548.95	482.31	294.01	255.85	262.99
370	544.07	539.53	459.72	280.00	255.96	264.13
380	505.77	530.25	437.58	266.94	252.75	264.38
390	469.26	496.31	401.24	254.82	249.75	264.61
400	434.39	492.91	430.96	243.59	246.77	258.93
410	401.03	459.73	395.71	233.20	243.98	253.70
420	369.07	453.56	423.15	223.63	241.31	245.97
430	338.39	421.09	390.01	214.84	238.75	236.01
440	308.89	435.15	387.06	206.79	233.45	225.01
450	280.49	449.57	385.60	199.47	222.81	211.26
460	318.88	420.30	357.54	186.20	210.05	196.74
470	293.71	394.54	332.58	173.98	198.09	183.27
480	270.13	368.52	308.25	162.71	186.86	170.76
490	248.09	343.99	285.59	152.37	176.39	159.18
500	227.44	322.63	265.52	142.87	166.49	148.39
510	208.06	300.74	245.81	134.18	157.26	138.41
520	189.84	281.28	228.14	126.24	148.63	129.15
530	172.69	261.73	210.98	119.00	140.56	120.58
540	156.50	243.25	194.97	112.43	133.07	112.66
550	141.20	229.79	181.35	106.49	125.74	105.28
560	154.18	213.26	167.35	98.26	118.93	98.48
570	140.98	201.56	155.61	90.75	112.45	92.17
580	128.75	186.78	143.35	83.87	106.28	86.33
590	117.46	172.81	131.86	77.59	100.56	80.97
600	107.00	162.81	122.18	71.87	94.99	75.98

TABLE 24

L_0 (μ-SEC/UNIT FAULT), T = 50 SEC

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
10	3813.16	2583.81	1140.73	545.73	455.35	90.57
15	3713.87	2504.70	1944.47	811.56	676.81	93.45
20	3576.31	3186.00	1932.42	1069.03	894.46	78.58
25	4283.24	3823.15	1926.68	1275.43	1080.95	63.18
30	4084.21	3660.70	1918.03	1446.49	1249.68	47.94
33	3953.00	3552.14	1914.38	1545.04	1347.22	38.84
35	3861.26	3475.68	1912.37	1608.59	1410.25	32.78
40	6053.82	4911.43	1908.84	1603.13	1341.91	17.68
45	5827.59	4728.76	1849.34	1493.05	1275.54	8.41
50	5617.55	4555.51	1848.81	1387.23	1211.76	- .83
55	5210.12	4390.83	1849.58	1319.22	1150.23	- 10.08
60	5022.10	4235.18	1851.63	1253.76	1091.15	- 19.30
65	4843.47	4086.87	1855.00	1190.64	1033.86	- 28.57
70	4673.91	3946.69	1859.66	1129.75	978.67	- 37.85
75	4513.09	3813.94	1865.63	1070.97	925.30	- 47.17
80	4218.21	3689.00	1872.88	1039.51	873.90	- 56.48
85	4068.48	3570.50	1751.08	1009.28	823.93	- 47.72
90	3922.95	3459.09	1757.16	980.09	775.63	- 38.91
95	3782.18	3354.20	1762.00	952.06	728.78	- 30.06
100	3644.74	3256.13	1765.59	924.90	683.50	- 21.23
105	3511.72	3163.80	1699.28	898.84	639.31	- 5.80
110	3381.93	3077.73	1699.01	873.64	596.43	9.61
115	3256.26	2997.48	1696.58	849.47	554.65	25.02
120	3133.81	2923.26	1692.00	826.15	514.09	40.34
125	3014.70	2775.72	1685.25	803.72	482.94	55.69
130	2925.03	2710.56	1676.37	781.90	452.62	70.94
135	2812.50	2649.51	1665.34	761.01	422.96	86.11
140	2702.53	2592.77	1652.24	740.85	394.07	101.11
145	2595.87	2407.79	1636.97	721.55	383.67	116.06
150	2491.56	2355.04	1619.65	702.95	373.56	130.83
155	2390.12	2303.63	1600.25	685.14	363.66	145.44
160	2291.23	2253.79	1578.90	668.06	354.01	159.82
165	2194.78	2165.46	1637.27	651.69	349.93	162.77
170	2100.68	2116.98	1614.22	636.02	345.95	165.66
175	2008.81	2069.01	1590.76	621.02	342.06	168.51
180	1919.09	2021.75	1566.99	606.69	338.28	171.30
185	1831.42	1980.74	1542.71	593.01	334.55	174.07
190	1745.70	1934.38	1518.09	579.95	330.92	176.79
195	1661.85	1888.47	1493.07	567.52	327.37	179.46

TABLE 24—*Continued*

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
200	1579.92	1843.24	1467.79	555.72	323.91	182.09
210	1497.97	1759.24	1415.91	515.37	317.21	187.21
220	1352.73	1671.83	1362.74	478.91	310.85	192.14
230	1217.61	1600.64	1308.09	446.04	304.74	196.89
240	1091.61	1516.62	1252.25	416.51	298.97	201.43
250	973.89	1434.00	1195.06	390.12	293.48	205.78
260	917.66	1353.03	1136.78	354.09	288.32	209.92
270	819.02	1273.30	1084.08	321.97	283.44	213.88
280	729.08	1195.04	1023.59	293.27	278.86	217.62
290	647.14	1117.86	965.02	267.79	274.56	221.16
300	572.23	1041.99	902.55	245.21	270.56	224.47
310	503.51	967.05	841.74	225.29	266.83	227.58
320	440.26	893.26	777.53	207.82	263.38	230.45
330	381.79	820.24	714.73	192.60	260.20	233.11
340	327.45	748.22	649.03	179.46	257.29	235.53
350	276.71	676.83	599.75	168.29	254.64	233.80
360	286.40	606.28	534.42	146.08	252.26	232.26
370	246.60	565.15	484.86	126.97	242.81	228.95
380	211.91	525.94	436.23	110.50	227.46	224.27
390	181.72	464.56	373.94	96.38	213.87	220.23
400	155.36	434.99	375.42	84.28	201.12	205.70
410	132.27	380.54	319.49	73.96	189.91	193.25
420	111.96	350.34	315.01	65.20	179.88	178.08
430	94.02	301.47	267.49	57.81	170.92	160.88
440	78.05	286.86	243.53	51.63	159.20	143.94
450	63.73	273.42	222.90	46.55	141.67	125.15
460	66.06	236.58	190.37	39.28	123.06	107.07
470	55.51	205.58	163.14	33.17	106.92	91.62
480	46.58	177.79	139.34	28.04	92.90	78.39
490	39.03	153.66	118.99	23.73	80.79	67.10
500	32.63	133.45	101.99	20.13	70.20	57.41
510	27.20	115.20	87.07	17.12	61.07	49.14
520	22.57	99.75	74.54	14.62	53.16	42.08
530	18.61	85.92	63.60	12.55	46.32	36.03
540	15.20	73.86	54.24	10.85	40.43	30.89
550	12.24	64.57	46.59	9.48	35.15	26.46
560	12.07	55.43	39.71	7.85	30.61	22.68
570	9.98	48.45	34.12	6.51	26.63	19.45
580	8.24	41.53	29.06	5.40	23.13	16.69
590	6.80	35.51	24.72	4.49	20.14	14.34
600	5.60	30.95	21.19	3.74	17.46	12.32

TABLE 25

L_1 (μ-SEC/UNIT FAULT), T = 200 SEC

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
10	41.54	15.49	10.35	4.97	1.73	.51
15	41.39	15.43	17.77	7.45	2.60	.94
20	41.19	20.28	17.74	9.92	3.55	1.35
25	51.21	25.17	17.74	12.39	4.57	1.75
30	50.89	25.05	17.68	14.85	5.60	2.16
33	50.67	24.96	17.65	16.32	6.22	2.41
35	50.51	24.90	17.62	17.30	6.63	2.57
40	82.60	36.39	17.56	19.54	7.36	2.97
45	82.11	36.20	16.95	21.63	8.09	3.38
50	81.57	35.99	16.86	23.71	8.82	3.79
55	77.94	35.77	16.76	25.87	9.54	4.19
60	77.30	35.53	16.66	28.01	10.26	4.59
65	76.61	35.26	16.54	30.14	10.97	4.99
70	75.87	34.99	16.41	32.25	11.68	5.38
75	75.08	34.69	16.28	34.33	12.38	5.78
80	71.90	34.38	16.13	36.49	13.07	6.17
85	71.01	34.05	14.86	38.62	13.76	6.58
90	70.07	33.71	14.70	40.72	14.45	6.99
95	69.08	33.34	14.52	42.78	15.12	7.39
100	68.04	32.97	14.33	44.82	15.79	7.79
105	66.96	32.57	13.58	46.83	16.45	8.19
110	65.82	32.16	13.38	48.81	17.10	8.58
115	64.64	31.73	13.16	50.74	17.74	8.96
120	63.41	31.29	12.94	52.65	18.37	9.34
125	62.14	30.00	12.71	54.52	19.01	9.71
130	61.37	29.52	12.47	56.37	19.64	10.08
135	60.01	29.03	12.21	58.17	20.26	10.44
140	58.61	28.53	11.95	59.94	20.86	10.79
145	57.17	26.57	11.69	61.66	21.50	11.13
150	55.69	26.04	11.41	63.34	22.11	11.47
155	54.16	25.49	11.12	64.97	22.72	11.80
160	52.60	24.93	10.83	66.56	23.31	12.11
165	51.00	23.91	11.09	68.10	23.90	12.41
170	49.37	23.32	10.78	69.59	24.48	12.70
175	47.70	22.71	10.47	71.04	25.04	12.98
180	46.00	22.10	10.15	72.43	25.58	13.25
185	44.27	21.53	9.82	73.78	26.11	13.52
190	42.50	20.88	9.48	75.07	26.63	13.77
195	40.71	20.22	9.14	76.30	27.13	14.02

TABLE 25—*Continued*

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
200	38.88	19.55	8.80	77.49	27.61	14.26
210	36.99	18.23	8.09	79.64	28.54	14.70
220	33.16	16.81	7.36	81.57	29.39	15.11
230	29.25	15.50	6.61	83.30	30.18	15.48
240	25.26	14.00	5.84	84.81	30.90	15.81
250	21.21	12.47	5.06	86.09	31.54	16.10
260	18.24	10.91	4.27	87.12	32.11	16.35
270	14.09	9.33	3.49	87.94	32.61	16.55
280	9.90	7.72	2.68	88.56	33.02	16.72
290	5.69	6.09	1.86	88.95	33.36	16.84
300	1.46	4.45	1.04	89.13	33.61	16.91
310	- 2.77	2.80	.21	89.10	33.79	16.95
320	- 6.99	1.14	- .62	88.85	33.89	16.93
330	- 11.20	- .52	- 1.45	88.39	33.90	16.88
340	- 15.38	- 2.18	- 2.27	87.71	33.83	16.78
350	- 19.51	- 3.84	- 3.15	86.83	33.69	16.64
360	- 27.54	- 5.48	- 3.96	85.87	33.46	16.46
370	- 31.58	- 7.37	- 4.87	84.77	33.17	16.24
380	- 35.58	- 9.33	- 5.81	83.51	32.83	15.98
390	- 39.51	-10.93	- 6.59	82.10	32.42	15.68
400	- 43.37	-13.17	- 8.43	80.55	31.92	15.37
410	- 47.15	-14.72	- 9.17	78.85	31.36	15.03
420	- 50.85	-17.17	-11.46	77.02	30.72	14.68
430	- 54.46	-18.66	-12.17	75.05	30.00	14.32
440	- 57.97	-22.32	-13.82	72.94	29.27	13.96
450	- 61.38	-26.23	-15.59	70.71	28.60	13.63
460	- 79.00	-27.61	-16.25	68.67	27.95	13.31
470	- 82.20	-29.09	-16.94	66.55	27.27	12.97
480	- 85.31	-30.41	-17.57	64.35	26.56	12.62
490	- 88.31	-31.69	-18.18	62.06	25.81	12.26
500	- 91.20	-33.11	-18.84	59.70	25.04	11.89
510	- 93.98	-34.32	-19.41	57.26	24.23	11.50
520	- 96.63	-35.63	-20.03	54.75	23.40	11.10
530	- 99.17	-36.76	-20.56	52.18	22.54	10.69
540	-101.58	-37.84	-21.07	49.53	21.65	10.27
550	-103.87	-39.51	-21.71	46.83	20.75	9.84
560	-126.14	-40.50	-22.18	44.56	19.83	9.39
570	-128.20	-42.24	-22.82	42.25	18.89	8.94
580	-130.15	-43.14	-23.25	39.90	17.93	8.47
590	-131.99	-44.00	-23.65	37.52	16.96	8.00
600	-133.71	-45.63	-24.23	35.10	15.98	7.51

TABLE 26

L_1 (μ-SEC/UNIT FAULT), T = 150 SEC

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
10	97.24	96.73	117.45	13.80	13.09	7.11
15	96.66	96.17	201.45	20.66	19.62	12.80
20	95.85	126.03	200.92	27.47	26.77	18.14
25	118.72	155.96	200.65	34.21	34.33	23.46
30	117.46	154.65	199.67	40.87	41.90	28.77
33	116.59	153.74	199.05	44.83	46.41	31.94
35	115.97	153.09	198.60	47.44	49.38	34.04
40	188.77	222.99	197.35	53.22	54.36	39.28
45	186.89	221.04	189.96	58.44	59.31	44.59
50	184.84	218.92	188.35	63.60	64.20	49.85
55	175.70	216.62	186.56	69.00	69.04	55.07
60	173.29	214.18	184.60	74.34	73.82	60.22
65	170.69	211.55	182.46	79.59	78.56	65.33
70	167.92	208.77	180.14	84.77	83.23	70.38
75	164.98	205.83	177.66	89.86	87.84	75.36
80	156.72	202.75	175.01	95.12	92.37	80.25
85	153.43	199.49	160.12	100.27	96.85	85.49
90	149.96	196.09	157.12	105.32	101.25	90.63
95	146.34	192.53	153.94	110.22	105.57	95.68
100	142.54	188.84	150.60	115.03	109.80	100.59
105	138.59	184.99	141.27	119.69	113.96	105.50
110	134.47	181.00	137.59	124.23	118.03	110.28
115	130.22	176.87	133.75	128.62	122.01	114.93
120	125.81	172.63	129.76	132.87	125.88	119.43
125	121.26	163.62	125.61	136.98	129.78	123.81
130	117.63	159.10	121.32	140.97	133.56	128.04
135	112.82	154.44	116.88	144.79	137.24	132.12
140	107.87	149.68	112.32	148.46	140.79	136.04
145	120.82	137.22	107.61	151.95	144.50	139.81
150	97.63	132.20	102.79	155.29	148.07	143.42
155	92.34	127.05	97.83	158.44	151.51	146.85
160	86.95	121.80	92.79	161.42	154.80	150.11
165	81.46	114.30	92.37	164.22	158.03	153.05
170	75.88	108.81	87.11	166.83	161.11	155.83
175	70.22	103.22	81.75	169.26	164.04	158.44
180	64.47	97.56	76.32	171.49	166.80	160.87
185	58.66	92.05	70.79	173.54	169.42	163.15
190	52.78	86.19	65.19	175.39	171.88	165.26
195	46.84	80.24	59.52	177.04	174.18	167.18

TABLE 26—*Continued*

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
200	40.86	74.24	53.81	178.50	176.30	168.93
210	30.66	62.19	42.18	180.74	180.08	171.90
220	18.42	49.72	30.39	182.24	183.16	174.14
230	6.11	37.47	18.45	182.99	185.58	175.66
240	- 6.23	24.67	6.46	182.99	187.29	176.43
250	- 18.53	11.75	- 5.58	182.23	188.30	176.45
260	- 31.79	- 1.19	- 17.58	180.81	188.59	175.74
270	- 43.90	- 14.15	- 29.63	178.70	188.17	174.27
280	- 55.86	- 27.04	- 41.42	175.93	187.03	172.08
290	- 67.61	- 39.84	- 53.19	172.49	185.18	169.15
300	- 79.11	- 52.47	- 64.59	168.41	182.64	165.51
310	- 90.30	- 64.93	- 75.93	163.70	179.40	161.15
320	-101.16	- 77.11	- 86.74	158.38	175.48	156.13
330	-111.64	- 89.03	- 97.46	152.46	170.89	150.42
340	-121.71	-100.58	-107.49	145.97	165.67	144.09
350	-131.30	-111.78	-119.84	138.95	159.80	137.30
360	-166.86	-122.53	-128.95	132.64	153.34	129.97
370	-175.57	-138.47	-141.19	126.00	146.71	122.12
380	-183.84	-154.79	-153.62	119.01	140.04	113.79
390	-191.62	-164.16	-161.07	111.73	132.96	105.04
400	-198.89	-183.03	-194.35	104.15	125.01	96.67
410	-205.65	-191.33	-200.64	96.29	116.68	88.02
420	-211.87	-210.79	-239.65	88.19	107.74	79.64
430	-217.54	-217.87	-244.81	79.85	98.21	71.60
440	-222.63	-249.45	-268.45	71.31	89.19	64.00
450	-227.14	-282.61	-293.38	62.59	81.63	57.50
460	-284.09	-287.98	-297.10	55.55	74.80	51.56
470	-287.59	-294.18	-301.40	48.44	67.86	45.54
480	-290.62	-298.60	-304.30	41.23	60.80	39.45
490	-293.15	-302.53	-306.77	33.96	53.64	33.31
500	-295.20	-307.59	-310.00	26.64	46.39	27.09
510	-296.74	-310.52	-311.64	19.27	39.07	20.84
520	-297.79	-314.26	-313.79	11.87	31.69	14.55
530	-298.34	-316.18	-314.57	4.44	24.26	8.23
540	-298.39	-317.59	-314.91	- 2.99	16.80	1.90
550	-297.94	-323.79	-317.05	- 10.41	9.45	- 4.48
560	-354.72	-324.19	-316.53	- 15.64	2.09	- 10.85
570	-353.49	-330.32	-318.27	- 20.84	- 5.18	- 17.24
580	-351.91	-329.71	-316.88	- 26.03	- 12.35	- 23.62
590	-349.98	-328.62	-315.05	- 31.19	- 19.50	- 29.97
600	-347.70	-333.19	-315.45	- 36.32	- 26.47	- 36.35

TABLE 27

L_1 (μ-SEC/UNIT FAULT), $T = 100$ SEC

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
10	286.92	260.47	333.17	48.61	42.20	24.32
15	283.50	257.45	570.46	72.63	63.12	40.44
20	278.74	335.11	567.76	96.31	85.58	54.67
25	341.93	411.74	565.49	119.05	108.48	68.79
30	334.59	404.89	560.93	141.01	131.01	82.85
33	329.61	400.17	557.96	153.95	144.34	91.21
35	326.06	396.78	555.83	162.42	153.09	96.76
40	524.59	573.51	549.95	179.24	164.30	110.51
45	514.10	563.79	526.64	192.96	175.32	124.70
50	502.87	553.45	519.16	206.36	186.13	138.67
55	472.06	542.50	510.88	220.76	196.74	152.45
60	459.23	530.99	501.86	234.79	207.09	165.94
65	445.61	518.83	492.03	248.42	217.27	179.25
70	431.23	506.13	481.47	261.62	227.19	192.25
75	416.13	492.85	470.18	274.39	236.86	204.98
80	387.31	479.08	458.21	287.73	246.23	217.35
85	370.73	464.71	413.85	300.50	255.38	231.20
90	353.43	449.86	400.33	312.71	264.23	244.60
95	335.53	434.49	386.05	324.28	272.79	257.55
100	316.91	418.70	371.11	335.30	281.02	269.97
105	297.76	402.38	341.05	345.63	288.98	282.35
110	277.96	385.64	324.67	355.35	296.60	294.14
115	257.72	368.45	307.62	364.36	303.90	305.34
120	236.94	350.93	290.02	372.69	310.84	315.89
125	215.72	323.56	271.75	380.32	317.83	325.86
130	195.94	305.20	252.96	387.30	324.43	335.15
135	173.97	286.46	233.65	393.52	330.65	343.77
140	151.59	267.44	213.95	399.01	336.44	351.67
145	129.01	234.51	193.72	403.73	342.59	358.90
150	106.10	214.76	173.14	407.70	348.24	365.40
155	83.03	194.69	152.19	410.89	353.39	371.16
160	59.80	174.41	131.02	413.29	358.01	376.16
165	36.46	150.74	116.21	414.91	362.30	380.09
170	13.05	129.92	94.52	415.75	366.03	383.35
175	- 10.39	108.88	72.64	415.79	369.21	385.94
180	- 33.80	87.76	50.72	415.05	371.82	387.84
185	- 57.16	66.66	28.60	413.52	373.88	389.06
190	- 80.40	45.24	6.48	411.20	375.37	389.61
195	-103.49	23.73	- 15.68	408.10	376.28	389.46

TABLE 27—*Continued*

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
200	-126.34	2.27	- 37.72	404.24	376.63	388.64
210	-177.42	- 40.80	- 81.75	394.89	375.60	384.94
220	-221.28	- 83.53	-125.11	382.88	372.30	378.56
230	-263.63	-126.58	-167.68	368.26	366.68	369.49
240	-304.20	-168.03	-208.99	351.15	358.86	357.86
250	-342.67	-208.55	-248.91	331.67	348.83	343.69
260	-397.47	-247.73	-287.01	311.61	336.70	327.14
270	-431.34	-285.47	-324.89	289.73	322.50	308.15
280	-462.72	-321.40	-358.69	266.09	306.38	287.03
290	-491.30	-355.46	-391.11	240.89	288.35	263.79
300	-516.97	-387.28	-419.65	214.25	268.62	238.75
310	-539.56	-416.82	-446.55	186.34	247.20	211.91
320	-558.93	-443.76	-469.01	157.33	224.33	183.63
330	-574.99	-468.06	-489.61	127.37	200.05	153.92
340	-587.62	-489.47	-505.35	96.66	174.61	123.18
350	-596.75	-507.94	-530.59	65.40	148.05	92.76
360	-722.83	-523.29	-539.37	43.61	120.64	61.79
370	-726.51	-559.66	-559.90	21.72	95.27	30.75
380	-727.72	-595.35	-578.98	- .29	72.38	- .19
390	-726.45	-602.30	-577.20	- 22.27	49.23	- 31.06
400	-722.70	-643.17	-666.82	- 44.18	24.39	- 56.17
410	-716.49	-644.54	-659.02	- 65.94	- .53	- 81.02
420	-707.85	-681.75	-755.51	- 87.47	- 26.20	-102.09
430	-696.79	-677.25	-742.91	-108.71	- 52.51	-119.43
440	-683.35	-746.52	-785.12	-129.57	- 74.46	-133.49
450	-667.61	-817.37	-829.19	-149.97	- 87.79	-141.26
460	-805.82	-806.82	-812.87	-159.36	- 96.67	-145.78
470	-787.36	-798.85	-798.73	-168.52	-105.39	-150.21
480	-767.84	-786.31	-781.41	-177.47	-113.94	-154.55
490	-747.34	-772.81	-763.62	-186.19	-122.34	-158.80
500	-725.87	-762.47	-748.23	-194.66	-130.51	-162.97
510	-703.46	-747.09	-729.48	-202.88	-138.51	-167.03
520	-680.15	-733.90	-712.46	-210.84	-146.30	-171.00
530	-655.94	-716.73	-692.81	-218.52	-153.88	-174.87
540	-630.89	-698.73	-672.74	-255.93	-161.28	-178.62
550	-605.05	-691.54	-656.97	-233.03	-167.79	-182.29
560	-695.93	-672.00	-636.05	-231.46	-174.11	-185.85
570	-669.95	-664.48	-620.07	-229.95	-179.88	-189.31
580	-644.09	-643.62	-598.37	-228.49	-185.10	-192.66
590	-618.41	-622.18	-576.31	-227.09	-190.14	-195.89
600	-592.89	-611.83	-558.72	-225.75	-194.35	-199.02

TABLE 28

L_1 (μ-SEC/UNIT FAULT), T = 50 SEC

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
10	846.90	794.87	1073.94	194.35	180.39	109.06
15	815.41	765.58	1825.93	287.96	267.57	145.55
20	771.97	966.12	1805.56	377.34	355.44	166.78
25	905.69	1148.86	1786.34	455.48	436.20	187.30
30	841.71	1087.10	1759.71	524.73	510.93	207.68
33	799.11	1045.46	1742.95	563.73	553.67	219.73
35	769.20	1016.03	1731.25	588.45	581.07	227.70
40	1166.07	1415.64	1700.27	621.45	586.89	247.34
45	1084.08	1338.64	1614.96	635.66	592.30	271.22
50	1000.48	1261.11	1577.99	648.79	597.40	294.54
55	877.36	1182.85	1537.96	666.31	602.19	317.32
60	789.41	1104.31	1495.17	682.19	606.66	339.41
65	699.49	1024.81	1449.31	696.38	610.84	360.96
70	607.83	944.94	1400.77	708.84	614.70	381.77
75	514.66	864.51	1349.51	719.53	618.25	401.88
80	403.86	783.96	1295.89	730.93	621.48	421.14
85	307.92	702.60	1149.43	739.91	624.40	451.07
90	210.86	621.05	1088.61	746.46	626.99	479.46
95	113.51	539.10	1024.12	750.53	629.27	506.28
100	15.29	457.20	956.51	752.16	631.21	531.33
105	- 82.59	374.66	848.24	751.31	632.85	557.65
110	- 180.58	292.09	773.77	747.99	634.15	581.75
115	- 277.59	209.29	696.22	742.22	635.14	603.61
120	- 373.89	126.72	616.28	734.01	635.79	623.05
125	- 468.95	40.27	533.55	723.38	636.35	640.17
130	- 566.77	- 42.67	448.91	710.24	636.34	654.77
135	- 658.24	- 125.66	362.44	694.82	635.77	666.84
140	- 747.91	- 208.21	274.92	677.05	634.64	676.28
145	- 834.76	- 280.37	185.88	657.13	631.27	683.14
150	- 919.22	- 362.37	96.31	634.97	626.75	687.34
155	-1000.48	- 443.78	6.27	610.76	621.07	688.86
160	-1078.45	- 524.05	- 83.44	584.54	614.28	687.72
165	-1152.87	- 594.56	- 177.61	556.40	605.04	684.81
170	-1223.50	- 672.75	- 266.80	526.43	594.50	679.95
175	-1290.11	- 749.55	- 355.32	494.73	582.66	673.13
180	-1352.48	- 824.43	- 442.48	461.41	569.61	664.43
185	-1410.41	- 900.31	- 528.80	426.56	555.22	653.78
190	-1463.69	- 971.68	- 613.44	390.32	539.66	641.28
195	-1512.17	-1041.00	- 696.41	352.79	522.91	626.94

TABLE 28—*Continued*

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
200	-1555.58	-1107.80	- 777.07	314.18	505.09	610.87
210	-1702.91	-1237.83	- 932.13	250.57	465.97	573.40
220	-1759.70	-1353.65	-1076.25	184.54	422.90	529.47
230	-1799.02	-1469.78	-1208.34	116.68	375.67	479.39
240	-1820.48	-1561.11	-1326.38	47.67	325.29	423.94
250	-1823.86	-1639.09	-1429.49	- 21.75	271.99	363.54
260	-1910.28	-1702.73	-1516.08	- 70.23	216.44	299.10
270	-1885.72	-1751.74	-1594.56	-188.13	158.91	230.72
280	-1848.69	-1785.49	-1645.60	-165.34	100.11	159.84
290	-1799.53	-1803.82	-1682.80	-211.42	40.33	86.78
300	-1738.52	-1806.51	-1695.82	-256.11	- 19.68	12.87
310	-1666.06	-1793.54	-1694.49	-299.11	- 79.65	- 61.56
320	-1582.64	-1765.08	-1668.79	-340.14	-138.80	-135.13
330	-1488.81	-1721.26	-1628.88	-378.94	-196.86	-207.52
340	-1385.17	-1662.63	-1565.51	-415.24	-253.11	-277.40
350	-1272.53	-1589.46	-1525.39	-448.77	-307.28	-335.45
360	-1413.75	-1502.69	-1430.59	-428.54	-358.68	-390.14
370	-1304.54	-1474.06	-1362.93	-409.83	-389.71	-437.04
380	-1199.82	-1439.55	-1285.56	-392.56	-401.43	-476.41
390	-1099.51	-1333.58	-1156.44	-376.73	-412.29	-512.06
400	-1003.16	-1305.76	-1211.69	-362.24	-422.97	-513.92
410	- 910.42	-1194.21	-1077.15	-349.06	-432.77	-515.55
420	- 820.95	-1148.58	-1108.31	-337.13	-441.96	-502.88
430	- 734.43	-1032.18	- 980.09	-326.42	-450.51	-478.34
440	- 650.55	-1025.38	- 929.28	-316.88	-444.77	-448.33
450	- 569.09	-1017.33	- 884.25	-308.49	-414.28	-405.93
460	- 625.29	- 914.53	- 784.12	-277.89	-374.82	-360.78
470	- 556.49	- 825.46	- 697.66	-250.68	-339.21	-320.72
480	- 494.26	- 741.31	- 618.58	-226.44	-307.02	-285.12
490	- 438.05	- 665.18	- 548.33	-204.95	-278.16	-253.59
500	- 387.12	- 599.65	- 487.83	-185.93	-251.87	-225.48
510	- 340.86	- 537.12	- 432.22	-169.15	-228.33	-200.60
520	- 298.70	- 482.54	- 383.97	-154.41	-207.15	-178.52
530	- 260.14	- 431.07	- 339.92	-141.52	-188.12	-158.94
540	- 224.72	- 384.33	- 300.72	-130.35	-171.15	-141.63
550	- 192.03	- 348.23	- 267.86	-120.75	-154.97	-126.18
560	- 199.66	- 309.75	- 236.70	-105.79	-140.59	-112.53
570	- 173.83	- 280.44	- 210.80	- 92.78	-127.36	-100.43
580	- 151.12	- 248.86	- 185.98	- 81.43	-115.18	- 89.70
590	- 131.19	- 220.30	- 163.82	- 71.59	-104.40	- 80.25
600	- 113.66	- 198.55	- 145.33	- 63.05	- 94.20	- 71.84

TABLE 29

L_2 (μ-SEC/UNIT FAULT), T = 100 SEC

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
10	75.19	45.70	24.87	17.56	10.24	2.45
15	74.13	45.07	42.55	26.22	15.31	4.51
20	72.66	58.51	42.28	34.74	20.83	6.46
25	88.81	71.68	42.01	43.10	26.67	8.40
30	86.53	70.23	41.53	51.29	32.47	10.32
33	84.98	69.22	41.21	56.10	35.89	11.46
35	83.87	68.50	40.98	59.24	38.13	12.21
40	134.26	98.61	40.34	66.30	42.12	14.07
45	130.90	96.44	38.38	72.72	46.03	15.94
50	127.25	94.09	37.56	78.96	49.84	17.76
55	118.54	91.55	36.64	85.32	53.56	19.54
60	114.27	88.84	35.65	91.47	57.16	21.27
65	109.72	85.94	34.56	97.38	60.66	22.96
70	104.88	82.88	33.40	103.04	64.04	24.59
75	99.78	79.65	32.15	108.44	67.30	26.17
80	91.30	76.28	30.84	113.81	70.41	27.68
85	85.69	72.74	27.32	118.85	73.39	29.22
90	79.83	69.07	25.85	123.57	76.23	30.69
95	73.78	65.25	24.31	127.93	78.92	32.08
100	67.50	61.33	22.71	131.96	81.45	33.37
105	61.06	57.26	20.17	135.61	83.82	34.59
110	54.42	53.09	18.45	138.91	86.03	35.71
115	47.66	48.81	16.67	141.81	88.07	36.74
120	40.76	44.46	14.86	144.33	89.93	37.65
125	33.74	38.80	12.99	146.45	91.66	38.46
130	26.91	34.27	11.09	148.19	93.19	39.16
135	19.74	29.65	9.15	149.51	94.53	39.75
140	12.49	25.00	7.20	150.43	95.67	40.22
145	5.24	19.01	5.22	150.94	96.67	40.58
150	- 2.07	14.24	3.23	151.03	97.45	40.83
155	- 9.35	9.44	1.22	150.70	98.00	40.96
160	- 16.60	4.63	- .78	149.96	98.33	40.97
165	- 23.81	- .29	- 2.83	148.81	98.43	40.87
170	- 30.95	- 5.12	- 4.82	147.25	98.30	40.67
175	- 38.01	- 9.94	- 6.81	145.29	97.94	40.36
180	- 44.96	-14.72	- 8.77	142.93	97.34	39.95
185	- 51.80	-19.54	-10.72	140.17	96.51	39.44
190	- 58.48	-24.25	-12.63	137.03	95.45	38.82
195	- 65.01	-28.91	-14.52	133.51	94.16	38.10

TABLE 29—*Continued*

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
200.0	- 71.35	-33.48	-16.36	129.64	92.65	37.29
210.0	- 86.84	-42.51	-19.92	121.09	88.96	35.37
220.0	- 98.06	-51.02	-23.27	111.33	84.43	33.08
230.0	-108.29	-59.51	-26.39	100.43	79.04	30.45
240.0	-117.41	-66.97	-29.23	88.51	72.92	27.52
250.0	-125.33	-73.81	-31.77	75.70	66.09	24.29
260.0	-138.78	-79.93	-33.97	62.55	58.64	20.81
270.0	-144.15	-85.30	-36.04	48.85	50.62	17.09
280.0	-148.19	-89.85	-37.52	34.67	42.14	13.21
290.0	-150.84	-93.56	-38.73	20.18	33.24	9.16
300.0	-152.08	-96.37	-39.42	5.49	24.04	5.03
310.0	-151.90	-98.27	-39.83	- 9.24	14.59	.83
320.0	-150.30	-99.24	-39.71	- 23.89	5.03	- 3.37
330.0	-147.29	-99.26	-39.29	- 38.31	- 4.60	- 7.56
340.0	-142.92	-98.34	-38.35	- 52.38	- 14.17	-11.66
350.0	-137.21	-96.48	-37.99	- 65.94	- 23.63	-15.58
360.0	-157.86	-93.71	-36.28	- 77.33	- 32.84	-19.34
370.0	-149.88	-94.36	-35.24	- 88.17	- 41.34	-22.92
380.0	-140.86	-94.31	-33.92	- 98.44	- 49.08	-26.30
390.0	-130.89	-89.14	-31.19	-108.02	- 56.42	-29.42
400.0	-120.04	-88.65	-33.28	-116.87	- 63.76	-32.12
410.0	-108.37	-82.05	-30.02	-124.92	- 70.59	-34.57
420.0	- 95.96	-79.52	-31.15	-132.13	- 77.06	-36.68
430.0	- 82.90	-71.65	-27.47	-138.43	- 83.11	-38.46
440.0	- 69.27	-70.91	-25.60	-143.80	- 88.18	-39.93
450.0	- 55.19	-69.24	-23.45	-148.18	- 92.04	-41.05
460.0	- 53.60	-60.05	-19.38	-151.15	- 95.13	-41.91
470.0	- 38.91	-50.83	-15.30	-153.39	- 97.77	-42.61
480.0	- 24.02	-41.11	-11.10	-154.93	- 99.95	-43.14
490.0	- 9.02	-31.22	- 6.87	-155.73	-101.67	-43.51
500.0	6.01	-21.33	- 2.62	-155.80	-102.92	-43.70
510.0	21.02	-11.18	1.66	-155.14	-103.69	-43.72
520.0	35.93	- 1.01	5.95	-153.76	-103.98	-43.56
530.0	50.67	9.19	10.20	-151.65	-103.78	-43.24
540.0	65.17	19.34	14.41	-148.84	-103.11	-42.74
550.0	79.36	29.75	18.67	-145.33	-101.98	-42.07
560.0	108.60	39.69	22.75	-142.01	-100.39	-41.24
570.0	122.11	50.31	26.95	-138.25	- 98.37	-40.23
580.0	135.26	59.85	30.83	-134.05	- 95.93	-39.07
590.0	147.98	69.12	34.59	-129.44	- 93.08	-37.75
600.0	160.23	79.41	38.51	-124.41	- 89.86	-36.26

TABLE 30

L_2 (μ-SEC/UNIT FAULT), T = 50 SEC

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
10	539.81	388.22	615.55	172.86	120.49	85.62
15	514.88	370.66	1042.91	255.37	178.23	138.50
20	480.61	462.67	1024.21	333.24	237.52	183.62
25	554.04	543.29	1002.51	403.26	294.88	227.65
30	503.43	505.56	973.03	466.19	348.45	270.67
33	469.69	479.98	953.27	500.91	378.63	295.79
35	446.00	461.88	939.12	522.57	397.76	312.23
40	654.63	630.26	900.56	561.17	418.84	352.13
45	587.75	579.93	829.97	588.63	438.32	392.23
50	518.01	527.50	782.13	613.03	456.12	430.11
55	425.98	473.04	729.97	636.80	472.21	465.68
60	350.74	417.01	674.05	656.78	486.47	498.57
65	273.41	359.14	614.16	672.83	498.97	528.90
70	194.44	300.03	551.03	684.86	509.56	556.28
75	114.31	239.73	484.83	692.80	518.24	580.64
80	29.76	178.77	416.25	696.91	524.95	601.75
85	- 51.27	116.83	316.19	696.28	529.71	622.58
90	-132.04	54.58	242.79	690.92	532.46	639.10
95	-211.60	- 7.95	167.64	680.93	533.21	651.24
100	-290.12	- 70.19	91.65	666.26	531.96	658.88
105	-366.36	-132.48	11.11	647.14	528.70	662.06
110	-440.43	-194.15	- 65.83	623.56	523.45	660.31
115	-511.21	-255.14	-142.35	595.85	516.22	653.64
120	-578.68	-314.94	-217.51	564.05	507.09	642.16
125	-642.23	-365.40	-291.44	528.42	495.19	625.85
130	-707.15	-422.64	-363.04	488.81	481.27	604.91
135	-761.42	-478.18	-432.02	446.05	465.34	579.45
140	-810.74	-531.53	-497.52	400.09	447.56	549.80
145	-854.37	-555.94	-559.65	351.60	424.48	515.91
150	-892.38	-604.23	-617.49	300.53	399.28	478.25
155	-924.26	-649.49	-670.79	247.53	372.03	436.99
160	-949.88	-691.28	-718.92	192.85	343.00	392.67
165	-969.05	-717.64	-799.10	136.86	310.61	349.68
170	-981.66	-752.07	-837.16	79.94	276.60	304.54
175	-987.62	-782.44	-869.89	22.48	241.06	257.40
180	-986.89	-808.47	-896.93	- 35.13	204.35	208.80
185	-979.46	-832.62	-918.34	- 92.50	166.25	158.62
190	-965.40	-849.83	-933.83	-149.24	127.31	107.53
195	-944.80	-862.44	-943.33	-204.98	87.65	55.69

TABLE 30—*Continued*

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
200	- 917.85	- 870.35	- 946.78	-259.21	47.67	3.70
210	- 889.65	- 874.58	- 935.49	-354.66	- 33.39	-100.42
220	- 796.89	- 857.34	- 900.31	-441.53	-113.58	-201.77
230	- 685.12	- 828.94	- 841.99	-517.87	-192.15	-298.15
240	- 557.00	- 775.16	- 762.26	-581.85	-266.42	-386.72
250	- 415.74	- 704.47	- 662.84	-631.90	-335.06	-465.56
260	- 287.08	- 618.70	- 546.66	-664.05	-396.32	-532.33
270	- 130.40	- 519.35	- 419.49	-682.51	-449.11	-585.96
280	29.26	- 408.96	- 278.57	-687.00	-492.09	-624.49
290	188.17	- 289.50	- 131.05	-677.37	-524.49	-647.20
300	343.21	- 164.01	20.36	-653.84	-545.49	-653.31
310	491.21	- 34.72	171.61	-616.90	-554.71	-642.69
320	629.14	95.06	318.11	-567.30	-551.91	-615.65
330	754.15	223.04	457.68	-506.06	-537.16	-572.68
340	863.69	345.95	584.32	-434.44	-510.81	-515.16
350	955.42	461.60	711.60	-353.98	-473.35	-447.63
360	1223.74	567.05	806.72	-300.96	-425.73	-369.58
370	1287.20	687.12	905.74	-244.95	-375.60	-284.13
380	1337.44	801.64	989.49	-186.30	-326.62	-193.53
390	1373.75	871.90	1023.53	-125.77	-272.84	- 98.90
400	1395.83	981.86	1205.51	- 63.94	-211.45	- 23.54
410	1403.44	1023.91	1202.19	- 1.44	-146.93	52.07
420	1396.50	1112.91	1377.42	61.07	- 78.19	113.67
430	1375.08	1122.82	1345.45	122.95	- 6.24	160.98
440	1339.42	1244.22	1405.33	183.55	51.70	196.10
450	1289.92	1361.64	1463.90	242.19	80.38	208.06
460	1532.77	1341.19	1415.44	255.23	94.02	208.44
470	1472.02	1323.53	1371.55	267.70	107.26	208.80
480	1408.31	1296.88	1322.95	279.67	120.11	209.16
490	1341.93	1267.29	1274.31	291.10	132.67	209.50
500	1272.97	1241.53	1230.36	301.96	144.55	209.83
510	1201.54	1206.30	1181.52	312.24	156.09	210.14
520	1127.80	1173.37	1136.13	321.92	167.15	210.45
530	1051.88	1132.95	1087.15	330.97	177.71	210.74
540	973.92	1090.15	1038.15	339.39	187.88	211.02
550	894.17	1063.36	996.33	347.14	195.33	211.29
560	988.60	1016.73	947.16	328.35	202.46	211.54
570	914.36	987.65	905.79	310.97	208.06	211.79
580	843.88	938.40	856.51	294.88	212.22	212.02
590	777.05	888.24	807.22	280.05	216.17	212.24
600	713.54	853.96	764.61	266.43	217.85	212.44

TABLE 31

L_3 (μ-SEC/UNIT FAULT), $T = 50$ SEC

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
10	317.96	264.83	326.49	128.54	100.68	55.00
15	301.22	251.37	551.98	189.49	148.65	95.95
20	278.28	311.46	539.80	246.54	198.24	133.06
25	316.62	362.57	524.86	298.33	247.18	169.16
30	282.79	333.48	504.69	344.91	292.89	204.13
33	260.24	313.74	490.99	370.21	318.37	224.38
35	244.43	299.76	481.14	385.80	334.39	237.56
40	349.28	402.86	454.18	416.30	357.62	269.21
45	304.27	363.15	410.07	440.03	378.75	299.74
50	257.04	321.36	376.60	460.36	397.59	327.93
55	198.11	277.63	340.23	478.31	414.10	353.64
60	147.10	232.43	301.42	492.22	428.09	376.56
65	94.84	185.63	260.11	501.97	439.62	396.72
70	41.79	137.83	216.90	507.48	448.53	413.81
75	- 11.63	89.16	171.99	508.70	454.78	427.76
80	- 64.67	40.16	125.95	505.34	458.33	438.41
85	-117.37	- 9.32	70.00	497.30	459.18	446.37
90	-169.04	- 58.65	22.19	484.65	457.31	450.28
95	-218.95	-107.68	- 25.86	467.58	452.73	450.12
100	-267.07	-155.89	- 73.50	446.09	445.50	445.92
105	-312.54	-203.40	-117.85	420.57	435.59	437.40
110	-355.28	-249.62	-163.82	391.04	423.12	424.70
115	-394.58	-294.41	-208.26	358.02	408.13	407.90
120	-430.30	-337.28	-250.53	321.62	390.79	387.27
125	-462.05	-369.34	-290.60	282.24	370.33	362.81
130	-493.60	-407.98	-327.81	239.80	347.58	334.92
135	-516.42	-444.09	-361.90	195.32	322.62	303.78
140	-534.55	-477.27	-392.39	148.85	295.74	269.86
145	-547.67	-483.41	-419.27	101.19	264.13	233.17
150	-555.76	-510.04	-442.06	52.40	230.67	194.32
155	-558.68	-533.01	-460.63	3.23	195.51	153.57
160	-556.43	-552.04	-474.72	- 45.98	159.07	111.50
165	-549.04	-557.50	-508.83	- 94.76	120.24	70.80
170	-536.56	-568.31	-514.18	-142.67	80.58	29.58
175	-519.11	-574.83	-515.13	-189.25	40.27	- 11.94
180	-496.86	-576.98	-511.66	-234.09	- .19	- 53.19
185	-470.00	-576.45	-503.79	-276.75	- 40.97	- 94.19
190	-438.80	-569.87	-491.61	-316.85	- 81.35	-134.30
195	-403.54	-558.96	-475.19	-354.02	-121.16	-173.30

TABLE 31—*Continued*

Depth km	$10^9 \times P_L$ km^{-2}			$10^9 \times Q_L$ km^{-2}		
	Continent	Shield	Ocean	Continent	Shield	Ocean
200	- 364.62	- 543.87	- 454.78	-387.85	-159.90	-210.66
210	- 294.28	- 502.94	- 402.30	-442.52	-233.99	-279.95
220	- 196.87	- 445.30	- 336.17	-482.18	-300.86	-339.53
230	- 92.81	- 377.92	- 258.38	-505.58	-359.31	-387.60
240	14.38	- 295.37	- 171.92	-511.91	-406.79	-422.32
250	120.98	- 203.71	- 79.39	-500.99	-442.06	-442.64
260	230.40	- 106.08	15.66	-474.93	-463.91	-447.78
270	326.08	- 5.05	110.46	-434.50	-471.76	-437.57
280	412.03	95.93	201.21	-380.75	-465.35	-412.43
290	485.35	194.21	285.83	-315.48	-444.85	-373.00
300	543.92	286.43	359.91	-240.61	-410.95	-320.90
310	585.94	370.17	422.85	-158.43	-364.55	-257.53
320	610.15	442.56	470.15	- 71.42	-307.24	-185.48
330	615.80	501.71	502.80	17.75	-240.51	-106.71
340	602.73	545.58	516.80	106.39	-166.65	- 24.45
350	571.36	573.03	526.61	191.70	- 87.60	56.58
360	639.03	583.13	506.09	255.94	- 6.06	135.62
370	579.03	602.99	483.49	314.84	70.05	210.09
380	507.16	608.59	446.27	367.47	138.47	277.98
390	425.07	571.77	380.60	412.60	203.48	337.29
400	334.37	555.73	366.13	449.37	267.62	381.59
410	236.89	491.79	280.87	477.02	325.38	416.97
420	134.61	443.53	227.74	495.00	376.95	440.94
430	29.59	357.45	132.07	502.95	421.13	455.10
440	- 76.02	298.58	40.75	500.71	452.15	461.26
450	- 179.99	226.14	- 58.27	488.33	469.30	461.05
460	- 323.15	124.04	- 156.18	472.90	478.25	456.65
470	- 420.30	21.01	- 253.30	451.91	481.95	448.26
480	- 512.66	- 82.63	- 347.59	425.51	480.38	435.93
490	- 598.84	- 185.27	- 438.75	394.10	473.59	419.82
500	- 677.93	- 287.08	- 527.93	358.01	461.65	399.94
510	- 748.98	- 384.69	- 610.73	317.69	444.73	376.58
520	- 811.16	- 479.94	- 690.18	273.59	423.01	349.90
530	- 863.72	- 568.23	- 761.63	226.25	396.77	320.12
540	- 906.04	- 650.32	- 826.37	176.24	366.28	287.59
550	- 937.60	- 736.54	- 889.83	124.18	333.00	252.23
560	-1141.95	- 804.31	- 939.63	93.56	296.35	214.71
570	-1158.33	- 879.98	- 989.40	62.49	257.48	175.14
580	-1168.17	- 931.06	-1022.36	31.00	216.91	133.88
590	-1171.36	- 973.15	-1046.37	- .63	174.29	91.49
600	-1167.90	-1024.36	-1070.09	- 32.26	131.73	47.86

TABLE 32

FINITENESS FACTOR FOR SURFACE-WAVE SPECTRA (T = 250 SEC)

θ° \ T/π	.1	.2	.3	.4	.5	.6	.7	.8	.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
0	.998	.990	.978	.961	.939	.913	.883	.849	.811	.770	.726	.680	.631	.581	.529	.477	.424	.371	.318	.266
5	.997	.990	.978	.960	.939	.912	.882	.847	.809	.768	.723	.677	.628	.577	.525	.472	.418	.365	.312	.260
10	.997	.990	.977	.959	.936	.909	.878	.842	.803	.760	.714	.666	.616	.564	.511	.456	.402	.348	.294	.242
15	.997	.989	.975	.957	.933	.904	.871	.833	.792	.747	.699	.649	.596	.542	.487	.431	.375	.320	.265	.212
20	.997	.988	.974	.953	.927	.897	.861	.821	.776	.729	.678	.624	.569	.512	.454	.396	.338	.281	.225	.171
25	.997	.987	.971	.949	.920	.887	.848	.804	.756	.705	.650	.593	.533	.473	.412	.351	.291	.232	.175	.121
30	.996	.986	.968	.943	.912	.874	.831	.783	.731	.675	.615	.553	.490	.426	.362	.298	.236	.176	.118	.064
35	.996	.984	.964	.936	.901	.859	.811	.758	.700	.639	.574	.507	.439	.371	.303	.237	.173	.113	.056	.003
40	.995	.982	.959	.927	.888	.841	.788	.729	.664	.597	.526	.454	.381	.309	.238	.171	.106	.046	.009	.058
45	.995	.979	.953	.917	.873	.820	.760	.694	.623	.549	.472	.395	.317	.242	.169	.101	.037	.020	.071	.115
50	.994	.976	.946	.906	.855	.796	.729	.655	.577	.496	.413	.330	.249	.171	.098	.031	.030	.083	.127	.163
55	.993	.973	.939	.893	.836	.769	.694	.612	.526	.438	.349	.262	.178	.099	.027	.037	.092	.137	.172	.197
60	.992	.969	.930	.878	.813	.738	.655	.565	.471	.376	.282	.192	.107	.029	.039	.097	.144	.180	.203	.215
65	.991	.964	.921	.862	.789	.705	.612	.514	.413	.312	.214	.122	.038	.036	.099	.148	.184	.207	.217	.214
70	.990	.959	.910	.843	.762	.669	.567	.460	.352	.246	.146	.054	.027	.095	.148	.186	.209	.217	.212	.195
75	.988	.954	.898	.824	.733	.630	.519	.405	.290	.181	.080	.010	.085	.143	.185	.209	.217	.210	.190	.159
80	.987	.948	.886	.803	.702	.590	.470	.348	.228	.117	.017	.067	.133	.181	.208	.217	.209	.186	.152	.110
85	.985	.942	.873	.780	.670	.548	.419	.290	.168	.056	.040	.116	.171	.205	.217	.210	.186	.150	.105	.055
90	.984	.935	.858	.757	.637	.505	.368	.234	.109	.000	.089	.156	.198	.216	.212	.189	.151	.104	.052	.000
95	.982	.929	.844	.733	.602	.461	.317	.179	.055	.050	.131	.186	.213	.215	.195	.158	.109	.054	.001	.050
100	.980	.921	.828	.708	.567	.417	.268	.127	.004	.094	.165	.205	.217	.203	.168	.119	.062	.004	.048	.089
105	.978	.914	.813	.682	.533	.375	.220	.078	.041	.131	.190	.215	.211	.182	.134	.076	.016	.040	.085	.115
110	.976	.907	.797	.657	.498	.333	.174	.034	.080	.161	.206	.217	.197	.154	.097	.033	.027	.077	.112	.127
115	.974	.899	.781	.632	.465	.293	.132	.007	.114	.184	.215	.211	.177	.123	.058	.007	.063	.104	.125	.126
120	.972	.891	.766	.608	.432	.255	.093	.043	.142	.200	.217	.199	.152	.089	.021	.042	.092	.121	.128	.114
125	.970	.884	.751	.584	.401	.220	.057	.074	.164	.210	.214	.182	.125	.056	.013	.072	.111	.128	.121	.095
130	.968	.877	.736	.562	.372	.187	.025	.101	.182	.216	.207	.163	.098	.025	.043	.094	.123	.127	.108	.071
135	.967	.870	.723	.541	.345	.158	.003	.123	.195	.217	.196	.143	.071	.003	.067	.110	.128	.120	.089	.045
140	.965	.864	.710	.521	.321	.131	.027	.142	.204	.216	.184	.122	.047	.027	.086	.121	.127	.108	.070	.021
145	.963	.858	.698	.504	.299	.108	.048	.157	.210	.212	.171	.103	.025	.048	.101	.126	.123	.095	.050	.001
150	.962	.853	.688	.488	.280	.088	.066	.168	.214	.207	.159	.085	.005	.064	.111	.128	.116	.081	.031	.020
155	.961	.848	.679	.475	.264	.071	.080	.177	.216	.202	.147	.070	.011	.077	.118	.128	.108	.067	.015	.035
160	.960	.845	.671	.464	.250	.058	.092	.184	.217	.196	.137	.057	.023	.087	.122	.126	.101	.055	.002	.046
165	.959	.842	.665	.455	.239	.047	.100	.189	.217	.192	.128	.047	.033	.094	.125	.124	.094	.046	.008	.054
170	.958	.839	.661	.448	.232	.040	.106	.192	.217	.188	.122	.039	.040	.098	.126	.122	.089	.039	.015	.060
175	.958	.838	.658	.445	.227	.035	.110	.194	.217	.186	.118	.035	.044	.101	.127	.120	.086	.035	.019	.063
180	.958	.838	.657	.443	.226	.034	.111	.195	.217	.185	.117	.034	.045	.102	.127	.120	.084	.033	.021	.064

TABLE 33

FINITENESS FACTOR FOR SURFACE-WAVE SPECTRA (T = 100 SEC)

θ° \ T/π	.1	.2	.3	.4	.5	.6	.7	.8	.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
0	.998	.994	.987	.976	.963	.947	.928	.907	.883	.856	.828	.797	.765	.730	.594	.657	.619	.579	.539	.498
5	.998	.994	.986	.976	.962	.946	.927	.905	.881	.854	.825	.794	.761	.726	.690	.652	.613	.573	.532	.491
10	.998	.994	.986	.974	.960	.943	.923	.900	.875	.847	.816	.784	.749	.713	.675	.636	.595	.554	.512	.469
15	.998	.993	.984	.972	.957	.938	.916	.892	.864	.834	.801	.766	.730	.691	.650	.609	.566	.552	.478	.433
20	.998	.992	.983	.969	.952	.931	.907	.880	.849	.816	.780	.742	.701	.659	.615	.570	.524	.477	.430	.383
25	.998	.991	.980	.965	.945	.922	.895	.864	.829	.792	.752	.709	.664	.618	.570	.520	.470	.420	.370	.320
30	.997	.990	.977	.959	.937	.910	.878	.843	.804	.762	.716	.668	.618	.566	.513	.459	.405	.351	.297	.245
35	.997	.988	.973	.952	.926	.895	.858	.818	.773	.724	.673	.618	.562	.505	.446	.388	.329	.272	.216	.161
40	.996	.986	.968	.944	.913	.877	.834	.787	.735	.680	.621	.560	.497	.434	.370	.307	.245	.185	.128	.073
45	.996	.983	.962	.934	.898	.855	.806	.751	.691	.628	.562	.494	.424	.355	.287	.220	.156	.095	.039	.013
50	.995	.980	.956	.922	.880	.829	.772	.709	.641	.570	.495	.420	.345	.271	.199	.130	.066	.007	.046	.092
55	.994	.976	.948	.908	.858	.800	.734	.662	.585	.505	.423	.341	.260	.183	.110	.042	.019	.073	.119	.156
60	.993	.972	.938	.892	.835	.767	.692	.610	.523	.435	.346	.258	.174	.096	.024	.040	.095	.140	.174	.199
65	.992	.968	.928	.874	.808	.730	.645	.553	.457	.361	.266	.175	.090	.013	.054	.111	.155	.188	.208	.217
70	.990	.962	.916	.854	.778	.690	.594	.492	.388	.285	.186	.093	.010	.061	.120	.165	.196	.213	.217	.209
75	.989	.956	.904	.832	.746	.647	.540	.429	.317	.209	.108	.017	.061	.124	.171	.201	.216	.215	.201	.176
80	.987	.950	.890	.809	.711	.601	.484	.364	.246	.135	.034	.052	.121	.171	.203	.217	.213	.195	.164	.125
85	.986	.943	.874	.783	.675	.554	.426	.298	.176	.064	.032	.110	.167	.202	.217	.212	.190	.156	.112	.063
90	.984	.935	.858	.757	.637	.505	.368	.234	.109	.000	.089	.156	.198	.216	.212	.189	.151	.104	.052	.000
95	.982	.928	.842	.729	.597	.455	.310	.172	.047	.057	.137	.189	.214	.214	.192	.153	.102	.047	.008	.056
100	.979	.919	.824	.701	.558	.405	.254	.113	.009	.105	.173	.209	.216	.198	.159	.107	.049	.009	.059	.098
105	.977	.911	.806	.671	.518	.357	.200	.059	.058	.145	.198	.217	.206	.171	.119	.058	.003	.057	.098	.122
110	.975	.902	.788	.642	.478	.309	.149	.009	.101	.175	.212	.214	.186	.136	.074	.009	.049	.094	.121	.128
115	.973	.893	.770	.614	.440	.264	.102	.035	.136	.197	.217	.202	.159	.097	.030	.034	.085	.118	.128	.118
120	.970	.885	.752	.585	.403	.222	.059	.073	.163	.210	.214	.183	.127	.058	.011	.070	.110	.128	.122	.096
125	.968	.876	.734	.558	.368	.182	.020	.105	.184	.216	.205	.160	.094	.020	.047	.097	.124	.126	.105	.067
130	.966	.868	.717	.532	.335	.146	.014	.131	.199	.217	.191	.134	.061	.014	.076	.115	.128	.115	.081	.035
135	.964	.860	.701	.508	.305	.114	.043	.153	.209	.213	.175	.108	.030	.043	.097	.125	.124	.098	.055	.004
140	.962	.852	.686	.486	.277	.085	.068	.170	.215	.206	.157	.083	.003	.067	.112	.128	.115	.078	.029	.022
145	.960	.845	.672	.466	.253	.060	.089	.183	.217	.197	.139	.059	.021	.085	.122	.126	.102	.058	.005	.044
150	.958	.839	.660	.448	.231	.039	.107	.193	.217	.188	.122	.039	.040	.099	.127	.121	.088	.038	.016	.060
155	.957	.834	.650	.432	.213	.021	.121	.200	.216	.178	.106	.021	.056	.109	.128	.114	.075	.021	.032	.072
160	.956	.829	.641	.420	.198	.007	.132	.205	.214	.170	.093	.007	.068	.115	.128	.107	.062	.007	.045	.080
165	.955	.826	.634	.410	.186	.004	.140	.208	.211	.162	.083	.004	.077	.120	.127	.101	.052	.004	.054	.084
170	.954	.823	.629	.402	.178	.012	.145	.210	.209	.157	.075	.012	.083	.122	.125	.096	.045	.012	.060	.087
175	.953	.821	.626	.398	.173	.017	.148	.211	.208	.154	.070	.017	.086	.124	.124	.092	.040	.017	.063	.088
180	.953	.821	.625	.397	.171	.018	.149	.211	.208	.152	.069	.018	.087	.124	.124	.091	.039	.018	.064	.089

250, 200, 150, 100 and 50 sec. The location of the nodal lines on the patterns enables one to make a first guess as to the azimuth of the fault strike (which is often parallel or perpendicular to a nodal line). Having chosen a strike direction θ_0, one checks whether the pattern exhibits symmetry with respect to the "foreward" and "backward" directions as defined by θ_0. If not, one can perform a finiteness correction using Tables 32 and 33. For periods other than 250 and 100 sec, the tables may easily be extended applying the above definition of x in terms of θ (the angle between the station azimuth and θ_0) and τ/T. Then, using Tables 7 to 31, one inserts the values of P_R, Q_R, S_R, P_L and Q_L into equations (1) and (2) (omitting now the diminution factor) and performs a search over a grid for λ and δ, based on a least-square fitting of the observed amplitudes to the theoretical amplitudes at the corresponding station azimuths. One can also search over θ_0 at the same time, if desired, as a check on the estimate of the fault strike direction, applying a new finiteness correction at each step, in terms of the current value of θ_0. The Love and Rayleigh patterns should lead to the same results for each period investigated. If all the results converge to the same answer, one may continue and determine the value of $U_0(\omega)\, dS$ by taking the average of the observed amplitudes to the theoretical amplitudes over all the stations involved. If one now assumes that the source acts like a step function in time $U_0(\omega)\, dS = U_0\, dS/\omega$ where U_0 is a constant over all periods. We can thus multiply our previous results for each period by the corresponding ω, and we should obtain the same values of $U_0\, dS$ for each period, in which case we have attained the desired object.

Initial Phases

The detailed procedure of deriving the source parameters from the initial phases of isolated surface-wave signals was given by Ben-Menahem, Jarosch and Rosenman (1968). The correction of the observed phases for the spatial orientation of the source is obtained from Tables 7 to 31.

$$\begin{aligned} \text{Spatial phase of } U_z &= -\frac{\pi i}{4} + \tan^{-1}\left[\frac{q_R Q_R}{s_R S_R + p_R P_R}\right] \\ \text{Spatial phase of } U_\theta &= -\frac{3\pi i}{4} + \tan^{-1}\left[\frac{q_L Q_L}{p_L P_L}\right]. \end{aligned} \tag{50}$$

These functions are calculable directly from our tables.

Direct Measurements from the Time-Series

Seismograms of surface-wave signals at the far field may be considered as the Fourier transform of equations (1) and (2). Let us denote both $U_z(\omega)$ and $U_\theta(\omega)$ by the unified expression $(U_0\, dS)[\sin(\Delta/a)]^{-1/2} \exp[-\gamma\Delta - \pi i/4]A(\omega)$. Then

$$F(t) = \frac{U_0 dS}{2\pi\sqrt{\sin\left(\frac{\Delta}{a}\right)}} \int_{-\infty}^{\infty} A(\omega)\, e^{-\gamma\Delta}\, \gamma \exp\left[i(\omega - k\Delta) - \frac{i\pi}{4}\right] d\omega. \tag{51}$$

Following Copson (1965, p. 33), we approximate $F(t)$ by

$$F(t, T_0) = \left\{ \frac{(U_0 dS)\,|\,A(T_0, \lambda, \delta, h)\,|}{\exp(\gamma\Delta)\sqrt{\Delta \sin\left(\frac{\Delta}{a}\right)\frac{2T}{U_g}\left|\frac{dU_g}{dT}\right|}^{1/2}} \right\}_{T=T_0} \cdot \cos\left(\omega_0 t - k_0\Delta \pm \frac{\pi}{4} - \frac{\pi}{4} + \phi_0\right) + 0\left(\frac{1}{\Delta}\right) \tag{52}$$

where T_0, ω_0, k_0 refer to the stationary point given by the root of the equation $\Delta = tU_g(T_0)$ and U_g is the group-velocity at the period T_0. According to equations (1) and (2), the expression of $A(T_0)$ for Rayleigh waves is

$$A(T) = |\, s_R S_R + p_R P_R + iq_R Q_R \,| e^{i\phi_0} \tag{53}$$

and a similar expression for Love-waves. It is assumed that both $\exp(\gamma\Delta)$ and $|\,A(T_0)\,|$ are slowly varying functions of T_0. This claim is substantiated for the period range $100 < T_0 < 300$ sec (Tables 7 to 31). In equation (52), we take $+\pi/4$ whenever $dU_g/d\omega > 0$ and $-\pi/4$ for $dU_g/d\omega < 0$. Note that $F(t)$ incorporates a delta-function time-dependence via $U_0(\omega)$.

Equation (52) is valid only for $[dU_g/dT_0] \neq 0$. Otherwise

$$F(t, T_0) = \left\{ \frac{(U_0 dS)\,|\,A(T_0, \lambda, \delta, h)\,|}{\exp(\gamma\Delta)\Delta^{1/3}\sqrt{\sin\left(\frac{\Delta}{a}\right) C_0 \frac{T^{4/3}}{U_g^{2/3}}\left|\frac{d^2U_g}{dT^2}\right|}^{1/3}} \right\}_{T=T_0} \cdot \cos\left(\omega_0 t - k_0\Delta + \frac{\pi}{6} - \frac{\pi}{4} + \phi_0\right) + 0(\Delta^{-2/3}) \tag{54}$$

where

$$C_0 = \left(\frac{\Pi}{3}\right)^{1/3}\left[\Gamma\left(\frac{4}{3}\right)\right]^{-1} = 1.13719 \tag{55}$$

and

$$\left\{\frac{dU_g}{dT}\right\}_{T_0} = 0, \quad \left\{\frac{d^2U_g}{dT^2}\right\}_{T_0} > 0. \tag{56}$$

Equation (54) is valid for the Airy-phase regions of Rayleigh waves and Love waves. A careful look at equations (52) and (54) discloses that they can be regarded as the amplitude and phase of a spectral Fourier component at $T = T_0$. Therefore, if one could evaluate the derivatives dU_g/dT and d^2U_g/dT^2 at $T = T_0$ one could then, with the aid of Tables 7 to 31, obtain the spectral radiation pattern of mantle surface waves without needing to Fourier-analyze the time-series. Tables 34 to 35 and 37 to 38 provide the necessary tools for this job.

To obtain the derivatives of the group velocities of Love and Rayleigh waves with respect to the period T, we have calculated these velocities, at intervals of 1 sec in T, for the three structures given in Tables 1 to 3. The results for Rayleigh waves are

TABLE 34

DIMINUTION FACTOR FOR STATIONARY SURFACE WAVES

$10^{-3}\Delta$, km		$10^{-2} \times \sqrt{\Delta \sin(\Delta/a)} \exp[\gamma(T)\Delta]$ km$^{\frac{1}{2}}$						
T, sec		300	250	200	150-R	150-L	100-R	100-L
$10^{4}\gamma$, km^{-1}		0.157	0.200	0.246	0.366	0.421	0.530	0.670
6		.765	.786	.808	.868	.897	.958	1.041
8		.989	1.024	1.062	1.169	1.222	1.333	1.491
10	R_1	1.170	1.221	1.279	1.442	1.524	1.699	1.954
12		1.289	1.358	1.435	1.657	1.771	2.018	2.387
14		1.325	1.408	1.502	1.777	1.920	2.235	2.719
16		1.246	1.335	1.437	1.742	1.903	2.264	2.833
18		.989	1.069	1.161	1.441	1.592	1.936	2.491
20		-	-	-	-	-	-	-
22		1.164	1.280	1.417	1.845	2.083	2.646	3.601
24		1.730	1.919	2.144	2.859	3.265	4.238	5.930
26		2.180	2.440	2.749	3.756	4.337	5.753	8.280
28		2.530	2.857	3.250	4.547	5.309	7.197	10.652
30	R_2	2.771	3.156	3.623	5.193	6.131	8.494	12.927
32		2.880	3.308	3.833	5.628	6.718	9.511	14.887
34		2.825	3.274	3.828	5.756	6.948	10.053	16.182
36		2.557	2.988	3.527	5.432	6.630	9.803	16.228
38		1.965	2.317	2.759	4.354	5.373	8.119	13.882
40		-	-	-	-	-	-	-
42		2.200	2.639	3.202	5.300	6.686	10.554	19.000
44		3.204	3.877	4.747	8.049	10.268	16.563	30.666
46		3.966	4.841	5.982	10.388	13.400	22.089	42.060
48		4.532	5.580	6.959	12.379	16.145	27.200	53.262
50	R_3	4.894	6.078	7.650	13.939	18.382	31.649	63.734
52		5.022	6.292	7.992	14.916	19.889	34.996	72.474
54		4.871	6.155	7.890	15.083	20.336	36.569	77.882
56		4.362	5.560	7.194	14.087	19.204	35.291	77.295
58		3.321	4.270	5.576	11.183	15.415	28.951	65.210
60		-	-	-	-	-	-	-

TABLE 34—*Continued*

$10^{-3}\Delta$, km		$10^{-2} \times \sqrt{\Delta \sin(\Delta/a)} \exp[\gamma(T)\Delta]$ km$^{\frac{1}{2}}$						
T, sec		300	250	200	150-R	150-L	100-R	100-L
$10^{4}\gamma$, km^{-1}		0.157	0.200	0.246	0.366	0.421	0.530	0.670
62		3.657	4.784	6.363	13.389	18.869	37.012	88.168
64		5.287	6.976	9.364	20.185	28.762	57.658	141.249
66		6.499	8.650	11.719	25.873	37.278	76.371	192.405
68		7.380	9.908	13.547	30.636	44.632	93.446	242.109
70	R_4	7.922	10.729	14.805	34.293	50.516	108.089	287.998
72		8.084	11.044	15.381	36.493	54.355	118.858	325.685
74		7.800	10.748	15.107	36.713	55.290	123.560	348.184
76		6.952	9.663	13.707	34.120	51.958	118.664	343.881
78		5.268	7.387	10.575	26.964	41.517	96.901	288.788
80		-	-	-	-	-	-	-
82		5.753	8.208	11.969	32.018	50.401	122.865	387.256
84		8.286	11.923	17.547	48.082	76.532	190.663	618.013
86		10.148	14.731	21.880	61.409	98.833	251.631	838.792
88		11.484	16.816	25.207	72.465	117.924	306.834	1051.852
90	R_5	12.288	18.149	27.457	80.851	133.035	353.758	1247.145
92		12.501	18.625	28.437	85.772	142.701	387.799	1405.977
94		12.025	18.071	27.847	86.033	144.730	401.952	1498.670
96		10.688	16.201	25.196	79.733	135.623	384.937	1475.985
98		8.078	12.351	19.386	62.839	108.077	313.492	1236.172
100		-	-	-	-	-	-	-
102		8.778	13.657	21.834	74.252	130.564	395.544	1649.555
104		12.612	19.793	31.936	111.243	197.786	612.359	2626.266
106		15.413	24.398	39.731	141.758	254.844	806.352	3556.456
108		17.404	27.791	45.673	166.919	303.417	981.135	4450.224
110	R_6	18.584	29.933	49.647	185.851	341.591	1128.842	5265.586
112		18.869	30.656	51.318	196.770	365.684	1235.014	5924.416
114		18.116	29.689	50.158	196.994	370.174	1277.645	6302.956
116		16.071	26.567	45.299	182.232	346.245	1221.311	6196.131
118		12.125	20.218	34.792	143.364	275.426	992.855	5180.127
120		-	-	-	-	-	-	-

TABLE 35

DIMINUTION FACTOR OF AIRY PHASES OF SURFACE WAVES

$10^{-3}\Delta$, km	$10^{-1} \times \sqrt[3]{\Delta}\sqrt{\sin(\Delta/a)}\exp[\gamma(T)\Delta]$ km$^{\frac{1}{3}}$						
T, sec	300	250	200	150-R	150-L	100-R	100-L
$10^{4}\gamma$, km^{-1}	0.157	0.200	0.246	0.366	0.421	0.530	0.670
6	1.796	1.843	1.894	2.036	2.105	2.246	2.443
8	2.211	2.289	2.375	2.614	2.732	2.980	3.334
10 R_1	2.520	2.631	2.755	3.107	3.283	3.660	4.210
12	2.694	2.838	2.999	3.464	3.702	4.217	4.989
14	2.699	2.868	3.059	3.619	3.910	4.553	5.538
16	2.482	2.660	2.864	3.470	3.791	4.511	5.643
18	1.931	2.088	2.268	2.815	3.110	3.782	4.866
— 20 —	-	-	-	-	-	-	-
22	2.199	2.419	2.676	3.485	3.936	4.999	6.802
24	3.221	3.574	3.991	5.323	6.079	7.891	11.042
26	4.004	4.482	5.051	6.901	7.969	10.571	15.212
28	4.592	5.184	5.897	8.252	9.635	13.061	19.330
30 R_2	4.972	5.662	6.500	9.316	10.998	15.237	23.190
32	5.111	5.872	6.803	9.988	11.922	16.880	26.421
34	4.964	5.752	6.725	10.113	12.207	17.663	28.431
36	4.449	5.201	6.137	9.453	11.537	17.061	28.241
38	3.389	3.996	4.759	7.509	9.266	14.003	23.837
— 40 —	-	-	-	-	-	-	-
42	3.732	4.476	5.430	8.989	11.341	17.900	32.227
44	5.393	6.526	7.990	13.547	17.281	27.875	51.612
46	6.626	8.087	9.993	17.355	22.385	36.902	70.265
48	7.518	9.256	11.543	20.535	26.782	45.120	88.351
50 R_3	8.063	10.014	12.604	22.966	30.286	52.144	105.005
52	8.221	10.298	13.081	24.414	32.554	57.281	118.626
54	7.922	10.011	12.834	24.534	33.078	59.481	126.680
56	7.052	8.989	11.630	22.774	31.047	57.056	124.964
58	5.338	6.863	8.962	17.975	24.776	46.533	104.811
— 60 —	-	-	-	-	-	-	-

TABLE 35—*Continued*

$10^{-3}\Delta$, km	$10^{-1} \times \sqrt[3]{\Delta}\sqrt{\sin(\Delta/a)}\exp[\gamma(T)\Delta]$ km$^{\frac{1}{3}}$						
T, sec	300	250	200	150-R	150-L	100-R	100-L
$10^{4}\gamma$, km^{-1}	0.157	0.200	0.246	0.366	0.421	0.530	0.670
62	5.813	7.604	10.114	21.282	29.993	58.832	140.146
64	8.359	11.031	14.807	31.915	45.477	91.165	223.334
66	10.223	13.608	18.434	40.700	58.640	120.136	302.663
68	11.551	15.509	21.205	47.953	69.860	146.266	378.959
70 R_4	12.340	16.713	23.062	53.419	78.689	168.370	448.615
72	12.534	17.123	23.847	56.579	84.272	184.278	504.943
74	12.037	16.588	23.315	56.661	85.332	190.696	537.365
76	10.681	14.847	21.060	52.426	79.833	182.326	528.371
78	8.060	11.301	16.178	41.251	63.514	148.245	441.805
— 80 —	-	-	-	-	-	-	-
82	8.728	12.453	18.158	48.576	76.467	186.406	587.529
84	12.520	18.017	26.516	72.656	115.646	288.107	933.866
86	15.275	22.173	32.933	92.431	148.759	378.745	1262.519
88	17.220	25.213	37.795	108.655	176.816	460.069	1577.154
90 R_5	18.356	27.111	41.015	120.776	198.728	528.444	1862.987
92	18.606	27.720	42.324	127.657	212.388	577.177	2092.570
94	17.833	26.800	41.298	127.589	214.636	596.101	2222.550
96	15.794	23.942	37.235	117.831	200.427	568.868	2181.240
98	11.896	18.191	28.551	92.546	159.170	461.696	1820.572
—100 —	-	-	-	-	-	-	-
102	12.842	19.980	31.942	108.627	191.010	578.666	2413.238
104	18.391	28.863	46.570	162.219	288.419	892.964	3829.716
106	22.404	35.466	57.753	206.061	370.445	1172.124	5169.713
108	25.220	40.272	66.185	241.881	439.680	1421.755	6448.785
110 R_6	26.847	43.243	71.724	268.494	493.485	1630.801	7607.020
112	27.177	44.155	73.915	283.415	526.708	1778.834	8553.147
114	26.016	42.636	72.031	282.902	531.605	1834.817	9051.629
116	23.013	38.043	64.865	260.945	495.801	1748.840	8872.464
118	17.313	28.869	49.678	204.704	393.270	1417.661	7396.509
— 120 —	-	-	-	-	-	-	-

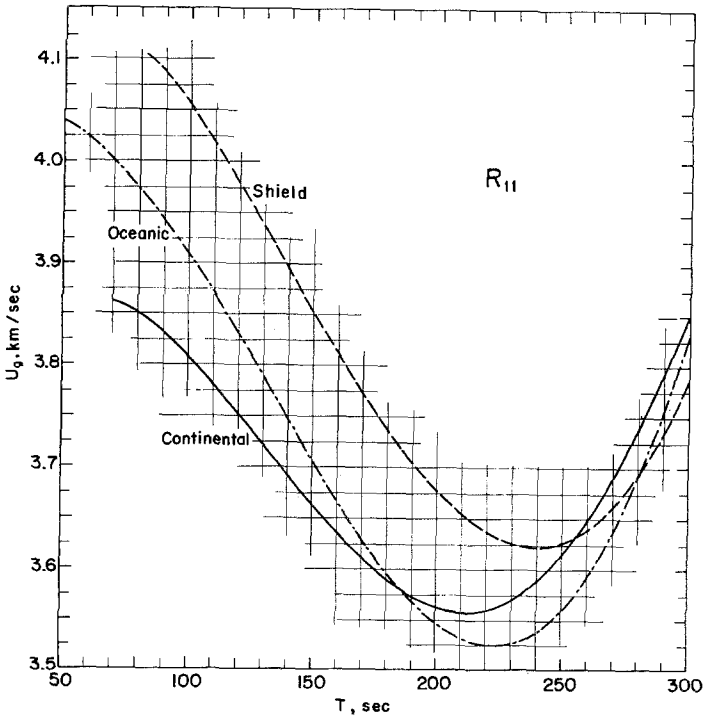

FIG. 14. Rayleigh group-velocity curves for various structural models. The least-square curves (Table 36) are indistinguishable from the theoretical curves.

TABLE 36

COEFFICIENTS FOR LEAST-SQUARE POLYNOMIAL FITS TO GROUP VELOCITY CURVES ($U = \sum a_i T^i$)

	Rayleigh			Love		
	Continent	Shield	Ocean	Continent	Shield	Ocean
Range of T (sec)	70 - 300	80 - 300	50 - 300	80 - 300	80 - 300	50 - 300
a_0	3.652262	3.299928	4.084299	3.514230	3.948703	4.409307
$10^3 \times a_1$	9.298104	32.090600	- .592224	19.735310	15.410002	1.026971
$10^5 \times a_2$	-13.122852	-45.087848	.788895	-23.009220	-19.334056	-3.157983
$10^7 \times a_3$	7.736555	29.410095	-3.445755	14.244369	12.520919	2.488129
$10^9 \times a_4$	- 3.105386	-10.862289	1.729090	- 4.991907	- 4.563851	-1.038556
$10^{12} \times a_5$	8.391111	21.870755	-2.472907	9.429715	8.873439	2.310391
$10^{15} \times a_6$	- 9.476110	-18.014642	.718165	- 7.403199	- 7.085130	-2.038126
$10^4 \times \bar{\sigma}$	2.642074	1.073384	4.803267	1.082193	1.175272	.575373

shown in Figure 14. A least-square curve fitting was then made. The coefficients are those shown in Table 36. The goodness of fit is represented by the standard deviation

$$\bar{\sigma} = \sqrt{\frac{\sum_{i=1}^{N} (x_i - y_i)^2}{N - K}} \tag{57}$$

TABLE 37

STATIONARY AND AIRY FACTORS OF RAYLEIGH WAVES

T sec	$\frac{2T}{U_g} \times \sqrt{\left\lvert \frac{dU}{dT} \right\rvert_g}$ km$^{-\frac{1}{2}}$ sec			$C_0 \left(\frac{T^4}{U_g^2} \left\lvert \frac{d^2U}{dT^2} \right\rvert_g\right)^{\frac{1}{3}}$ km$^{-\frac{1}{3}}$ sec		
	Continent	Shield	Ocean	Continent	Shield	Ocean
85	1.945	1.974	2.390	6.337	7.783	5.774
90	2.185	2.305	2.618	6.555	7.920	6.116
95	2.417	2.610	2.849	6.726	7.995	6.418
100	2.644	2.896	3.083	6.838	8.000	6.667
105	2.863	3.166	3.317	6.875	7.921	6.848
110	3.076	3.421	3.550	6.813	7.743	6.940
115	3.281	3.663	3.780	6.612	7.437	6.910
120	3.477	3.892	4.007	6.198	6.953	6.708
125	3.662	4.110	4.227	5.394	6.180	6.232
130	3.836	4.315	4.440	3.374	4.767	5.211
135	3.996	4.509	4.643	5.010	3.690	2.164
140	4.140	4.690	4.833	7.013	6.244	6.078
145	4.266	4.859	5.009	8.571	7.808	8.014
150	4.372	5.014	5.167	9.971	9.100	9.635
155	4.454	5.156	5.305	11.299	10.269	11.133
160	4.508	5.282	5.418	12.591	11.377	12.571
165	4.531	5.392	5.504	13.867	12.456	13.980
170	4.518	5.484	5.558	15.136	13.526	15.374
175	4.463	5.555	5.576	16.402	14.601	16.763
180	4.357	5.604	5.551	17.668	15.692	18.150
185	4.193	5.627	5.477	18.933	16.804	19.537
190	3.955	5.620	5.346	20.196	17.943	20.924
195	3.623	5.579	5.146	21.453	19.113	22.309
200	3.161	5.499	4.864	22.699	20.315	23.691
205	2.491	5.371	4.476	23.931	21.549	25.067
210	1.317	5.188	3.946	25.140	22.815	26.433
215	1.853	4.937	3.196	26.320	24.111	27.786
220	3.051	4.599	1.982	27.462	25.432	29.121
225	3.985	4.147	1.819	28.556	26.775	30.434
230	4.810	3.529	3.392	29.592	28.133	31.719
235	5.570	2.621	4.546	30.557	29.501	32.972
240	6.284	.628	5.548	31.436	30.869	34.187
245	6.962	2.646	6.465	32.213	32.230	35.359
250	7.606	3.916	7.327	32.868	33.572	36.481
255	8.218	4.962	8.147	33.379	34.884	37.548
260	8.797	5.903	8.933	33.715	36.155	38.554
265	9.340	6.781	9.688	33.841	37.369	39.492
270	9.845	7.613	10.413	33.708	38.512	40.356
275	10.309	8.409	11.110	33.249	39.565	41.139
280	10.725	9.172	11.778	32.364	40.509	41.835
285	11.091	9.903	12.416	30.890	41.322	42.435
290	11.399	10.601	13.024	28.525	41.976	42.932
295	11.644	11.264	13.601	24.546	42.441	43.318
300	11.816	11.888	14.145	15.699	42.678	43.582

where x_i and y_i are the discrete values of the compared functions and K is the number of degrees of freedom. It equals here the number of the coefficients in the polynomial, namely $K = 7$. These polynomials were then differentiated to obtain the appropriate factors of the stationary-phase approximation (Tables 37 and 38). Figure 15 shows the Rayleigh-wave amplitude factors in the period range 50 to 300 sec. Since the stationary factor vanishes in the range 210 to 240 sec (depending on the structural model), the Airy factor must be used instead. It is interesting to note that in general the two factors

$$2\Delta^{1/2} \frac{T}{U_g} \left| \frac{dU_g}{dT} \right|^{1/2} \quad \text{and} \quad C_0 \Delta^{1/3} \frac{T^{4/3}}{U_g^{2/3}} \left| \frac{d^2U_g}{dT^2} \right|^{1/3} \tag{58}$$

do not differ considerably from each other.

TABLE 38

STATIONARY AND AIRY FACTORS OF LOVE WAVES

T sec	$\frac{2T}{U_g} \times \sqrt{\left\lvert \frac{dU_g}{dT} \right\rvert}^{-\frac{1}{2}}$ km$^{-\frac{1}{2}}$ sec			$C_o \left(\frac{T^4}{U_g^2} \left\lvert \frac{d^2U_g}{dT^2} \right\rvert\right)^{\frac{1}{3}}$ km$^{\frac{1}{3}}$ sec$^{-\frac{1}{3}}$		
	Continent	Shield	Ocean	Continent	Shield	Ocean
85	1.572	.938	1.198	6.490	5.643	1.651
90	1.493	.798	1.272	6.642	5.752	.722
95	1.404	.619	1.342	6.755	5.824	1.731
100	1.307	.352	1.410	6.828	5.858	2.310
105	1.202	.370	1.475	6.860	5.853	2.767
110	1.089	.629	1.536	6.849	5.808	3.172
115	.968	.806	1.594	6.792	5.720	3.549
120	.839	.945	1.649	6.686	5.585	3.908
125	.700	1.062	1.701	6.526	5.401	4.256
130	.546	1.162	1.749	6.305	5.159	4.598
135	.365	1.248	1.794	6.010	4.846	4.939
140	.072	1.324	1.835	5.621	4.436	5.281
145	.337	1.390	1.873	5.096	3.872	5.627
150	.438	1.449	1.906	4.333	2.969	5.980
155	.487	1.500	1.935	2.915	2.027	6.344
160	.500	1.544	1.959	3.349	3.577	6.720
165	.478	1.582	1.978	4.734	4.425	7.110
170	.414	1.614	1.991	5.660	5.089	7.517
175	.278	1.640	1.998	6.418	5.672	7.943
180	.235	1.660	1.997	7.090	6.217	8.388
185	.478	1.673	1.987	7.714	6.748	8.854
190	.668	1.679	1.967	8.313	7.280	9.341
195	.842	1.676	1.936	8.900	7.823	9.850
200	1.012	1.663	1.891	9.484	8.385	10.379
205	1.180	1.639	1.830	10.072	8.968	10.928
210	1.350	1.601	1.750	10.667	9.574	11.497
215	1.522	1.546	1.645	11.272	10.204	12.083
220	1.697	1.470	1.509	11.885	10.855	12.685
225	1.876	1.367	1.329	12.507	11.525	13.301
230	2.059	1.226	1.081	13.134	12.209	13.927
235	2.247	1.030	.692	13.761	12.901	14.563
240	2.438	.731	.559	14.384	13.595	15.203
245	2.634	.287	1.099	14.994	14.285	15.845
250	2.832	.891	1.488	15.584	14.960	16.485
255	3.033	1.266	1.826	16.141	15.611	17.118
260	3.236	1.584	2.138	16.654	16.227	17.740
265	3.439	1.874	2.434	17.106	16.793	18.346
270	3.641	2.145	2.720	17.476	17.293	18.928
275	3.840	2.402	2.998	17.740	17.706	19.481
280	4.034	2.646	3.269	17.862	18.004	19.995
285	4.219	2.877	3.534	17.795	18.154	20.463
290	4.394	3.092	3.793	17.465	18.104	20.872
295	4.555	3.289	4.045	16.752	17.781	21.211
300	4.697	3.464	4.290	15.422	17.058	21.461

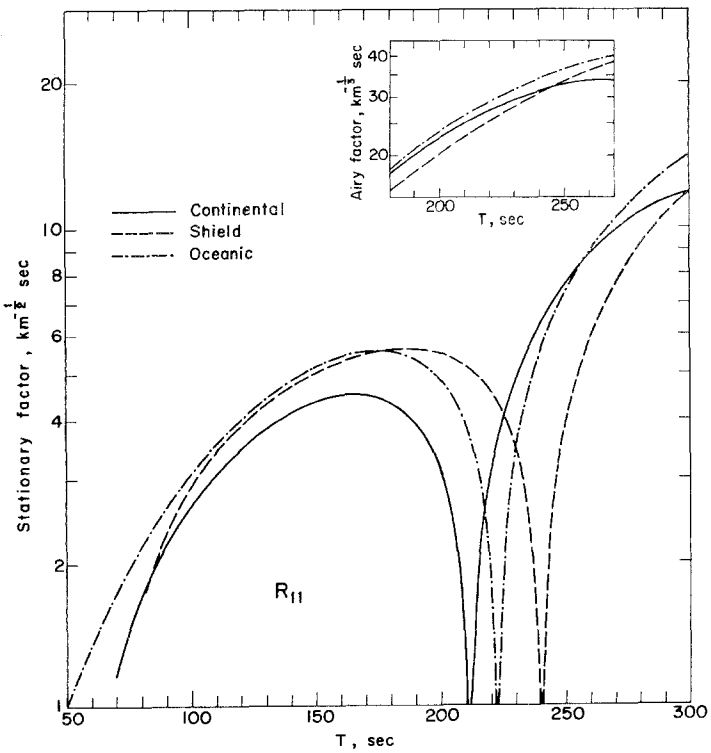

FIG. 15. Amplitude factors for Rayleigh-wave time-series. (Defined in Table 37).

Conclusions

The tables and figures of this paper enable one to interpret amplitudes of recorded mantle surface waves in terms of the source parameters.

Acknowledgments

This research has been sponsored by the Air-Force Cambridge Research Laboratories under Contract AF61(052)-954 through the European Office of Aerospace Research, OAR, USAF, as part of the Advanced Research Projects Agency's Project VELA UNIFORM.

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Manuscript received February 11 1970.